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TITLE: Instructural Strategies for Reducing Stress and Improving  
Self-Efficacy and Job Performance of Female Naval Recruits

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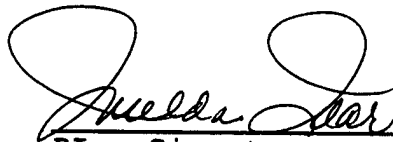
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# **I. INTRODUCTION**

## **A. SUBJECT OF STUDY**

From FY90 to FY97, the attrition rate of U.S. Navy recruits increased from 8.9% to 13.4%. Attrition data analysis found psychological disorders to be the most significant cause for female attrition. Males, on the other hand, were separated mostly for disciplinary and legal offenses. Training experts in the Navy know that academic difficulties are often manifested in problem behaviors (adjustment disorders, disciplinary and medical) which lead to separation from the Service. To stem attrition, maximize the acculturation process, and align training to address Fleet requirements, the Navy is revamping its training environment, instructional designs, and pedagogical practices. But also recognizing that the Navy operational and training environments have been male-dominated, there is concern that gender integration in training has not been appropriately accommodated in those efforts (i.e., learning styles, stress, self-efficacy, etc.). This concern is the subject of this study.

To resolve this concern, the Navy has committed to: (1) exploring the question of whether females, in particular, are experiencing high levels of stress that negatively impact their ability to achieve training success on a par with their male counterparts; and (2) investigating instructional approaches and associated technologies that would mitigate gender differences.

## **B. PURPOSE OF STUDY**

The purpose of this research is to increase the academic success of female recruits in a technical aspect of recruit training where, historically, female recruits have performed less satisfactorily than male recruits. Efforts include the development of an instrument that measures role and affective stress, and two training interventions: the Role Model treatment and the Advance Organizer treatment. The Role Model treatment addresses low expectations of success in stressful work situations such as firefighting, lack of experience serving in the various roles required of team members, and differences in communication and leadership strategies. The Advance Organizer identifies and accommodates behaviors which reflect cognitive learning strategies. It is postulated that these training interventions will improve self-efficacy and training performance. Success in the training arena would thus reduce stress measurably.

Accordingly, the study was designed to test three major null hypotheses:

- Providing women with models of effective performance will not reduce stress and will not improve job performance.
- Providing women with aids to structure the learning process will not reduce stress and will not improve job performance.
- Providing men and women with models of effective performance will not result in male/female attitudinal changes.

## **C. SCOPE OF RESEARCH**

This research effort began in FY97. In the second year, FY98, the scope included:

- Producing the videotape footage.
- Recording the audio.
- Programming the embedded criterion measures.
- Programming the two computer-based treatment interventions.
- Piloting the interventions to determine their viability.
- Collecting and analyzing initial data to ensure the appropriate direction of the study.
- Preparing the Year Two annual report.

## **D. BACKGROUND OF PREVIOUS WORK**

During Year One of the project, the research team analyzed the training needs, requirements, and problems associated with firefighting training of male and female recruits. The research team developed the instructional treatment plan, finalized the research design, and designed the instructional interventions. Research was conducted in the areas of cognitive science, learning theories, team competencies, communications, safety, teamwork, and leadership skills, team process measures, and gender differences in personal skills development. This research provided a theoretical basis for the instructional approach taken in the two treatments to achieve the desired effects of reducing stress and changing attitudes in male and female recruits.

During Year Two of the project, the instructional interventions were developed, the Stress Profile questionnaire was revised, the interventions were piloted, and the data from the pilot test was analyzed.

## **E. INSTRUCTIONAL INTERVENTIONS**

The two instructional interventions developed are described below. One used a role model strategy and the other used an advance organizer strategy. The two interventions are computer-based and use interactive multimedia presentations. Appendix C provides full-color screen displays from the two interventions.

### **1. Role Model Treatment**

The Role Model treatment was developed to help recruits develop appropriate attitudes regarding firefighting and the ability of females to perform in teams.

#### ***a. Objectives for Role Model Treatment***

Our research indicated that most recruits had not actually considered that firefighting would be part of their Navy experience. Furthermore, very few knew what behaviors would lead to success in situations requiring teamwork, especially in highly stressful situations. In teams, such as the fire party, they were likely to rely on strategies they knew and those strategies may not be the most effective. The Role Model treatment incorporated human modeling techniques which were expected to influence the students to imitate the model's behavior, or more precisely, imitate the model's choice of actions. It was expected that the learner would acquire an attitude which reflects the expressed or demonstrated activities of the human model.

Upon completion of the Role Model treatment, recruits would:

- Provide firefighting information to members of the team clearly, efficiently, and forcefully within Navy parameters.
- Use proper terminology and Navy standard communication procedures up and down the chain of command.
- Give orders with confidence, which is the product of knowledge and experience.
- State why they must learn to use protective breathing devices and firefighting equipment.
- Follow directions during firefighting exercises.
- Explain why they must refrain from inappropriate behavior, such as horseplay or unnecessary talking, during firefighting exercises.
- State why it is important to learn the safety hazards of firefighting equipment.
- Identify examples of monitoring others' performance and providing help when it is needed.
- Take and provide criticism and feedback objectively and constructively.
- Show situational awareness by identifying fire hazards.
- Show situational awareness by identifying egress routes.

#### ***b. Design of Role Model Treatment***

The content of the Role Model treatment was realistic firefighting scenarios in which examples of appropriate and inappropriate behaviors were demonstrated in the four areas of communication, safety, teamwork, and leadership skills. Multimedia presentations with voice-over narration were used to point out specific examples of the knowledge, skills, and attitudes related to these four areas that the recruit should develop during firefighting training.

The presentation introduced male and female sailors recounting their experiences on board ships. Each sailor introduced and narrated a short video sequence that discussed examples of communication, safety, teamwork, or leadership skills.

On-line exercises were provided in which the recruit was required to identify compliance and non-compliance with good leadership, communication, teamwork, and safety skills. Sixty-one (61) full-motion video segments were developed for these exercises.

It was expected that recruits who received the Role Model treatment would develop a sense of both team efficacy and self-efficacy, which would prepare them for firefighting training. The Role Model treatment was also expected to help them develop task-generic teamwork skills, which would stand them in good stead throughout their careers.

The average recruit took 50 minutes to complete the Role Model treatment.

## **2. Advance Organizer Treatment**

The goal of the Advance Organizer treatment was to bridge the gap between what the recruits already know and what they need to know in order to meaningfully learn to fight fires. The Advance Organizer treatment provided a context of meaning for new information to be learned. It was designed to help orient the students to the firefighting subject matter in such a way that the subject matter was directly related to any pre-existing knowledge the students may have had. It was expected that the Advance Organizer would help the students anticipate the performance requirements of the job by letting them know what to expect, as well as demonstrate the desired behaviors and attitudes for acceptable job performance.

The overall objective of the Advance Organizer was to provide recruits with a context of knowledge that would prepare them to succeed in the academic and hands-on components of firefighting training.

### ***a. Objectives for Advance Organizer Treatment***

Upon completion of the Advance Organizer treatment, the recruits would recognize that:

- Compartment ID and closures ID are necessary for reporting and responding to a fire.
- Understanding the characteristics and uses of portable and fixed fire extinguisher systems is necessary for effective firefighting.
- Closing ship's closures is necessary to prevent spreading of fire.
- All sailors must know the meaning of ship's alarms.
- Knowledge of the material conditions of readiness and the use of de-watering equipment is necessary to maintain watertight integrity.
- It is important to know the roles and responsibilities of fire party personnel.
- It is important to know how to don and use all breathing devices and protective clothing.
- It is necessary to know the types of fire extinguishing materials and systems that are used for the classes of fire and to know the hazards related to each.

One of the goals for the design of the Advance Organizer was to present a conceptual framework for the new knowledge and skills presented in firefighting training in ways that would appeal to different learning styles. In designing the strategies, two broad categories of learners were created from the different cognitive strategies. Instructional strategies that were expected to be effective for different learning styles were applied to each of the two broad categories of learners as prescriptions for strategies that would present the material most effectively for each type of learner. This is not to say that we expected a learner to use one cognitive strategy in all situations. We strongly suspected that learners would switch strategies to accommodate different subject areas and different circumstances. Therefore, the Advance Organizer provided different instructional modes to accommodate different cognitive strategies, and recorded which strategies were being used at particular points in the instruction.

### ***b. Design of Advance Organizer Treatment***

The Advance Organizer used a combination of learner control and intelligent tutoring with assessment of student requirements and presentation of appropriate material to provide a unique instructional experience to each student. The system presented information in ways that specifically addressed the style and/or concerns of the learner.

### *(1) Learner Control*

In addition to the typical learner control features such as pacing and review, the learner can select two different expository approaches: a structured instructional approach (tutorial), or an approach in which the learner imposes his or her own structure (concept map). Given the learning preferences indicated in the research, it was expected that a field-dependent/verbal/linear/operation learner would prefer the tutorial, while a field-independent/spatial/holistic/comprehension learner would prefer the concept map.

#### *(a) Selection of Tutorial*

If the student selected the tutorial, this indicated his or her preference for structured instructional sequencing and a verbal overview of the topic. Since the student had indicated that he or she was a field-dependent learner, the system structured the lesson for the student from the specific to the general.

#### *(b) Selection of Concept Map*

If the student selected the concept map, this indicated his or her preference to have control over the sequencing of information, thus exhibiting characteristics of a field-independent learner. Since the student had indicated that he or she was a field-independent learner, the system provided a graphic overview of firefighting in the form of a multimedia concept map. Once the introduction was over, the student was able to select specific topics. In doing so, the student was deriving his or her own structure of the information and exercising learner control over the structure and sequencing of the information. The concept map structure fits the field-independent learning style by providing a "big picture" of the lesson material before the student's attention turns to the details of the subject.

### *(2) Learner Questions*

The student can ask the system questions which are provided on each expository screen in the Advance Organizer, regardless of whether the user is accessing the screen via the linear tutorial or the course map. The purpose of the questions is twofold. First, they provide individualized, personalized instruction within the context of the computer-based training environment. Questions and answers are specific to the content in the lesson. Second, they provide a basis for automatically tailoring the information presented in the lesson to the user, based on the computer's assessment of the user's concerns. There are four categories of questions: gender, information, role, and remember. If the user asks more than one question in a category as he or she proceeds through the presentation, additional information relevant to that category is automatically presented for subsequent content areas. For example, the user may indicate, by asking questions in the gender category, that she is concerned about whether females can be effective firefighters. After she has asked two "gender" questions, information on females in firefighting is provided in subsequent content areas,

Table 1 shows the four categories of questions, the sample questions, the instructional concerns which the questions are designed to address, and the purpose of providing answers and additional information in the Advance Organizer treatment.

The learner questions are answered using multimedia presentations with motion video, audio, still photographs, and text, and the presentation is continued. Throughout the instruction the learner retains control of the pace and presentation. The learner can take the test at any time.

The average recruit took 60 minutes to complete the Advance Organizer treatment.

**Table 1. Advance Organizer Learner Questions**

<b>Category</b>	<b>Sample Question</b>	<b>User Concern</b>	<b>Purpose</b>
Gender	Is the weight of the equipment a problem for female sailors?	Recruit is showing concern about the ability of females to perform successfully in firefighting.	Information is designed to bolster confidence in males and females that females can be successful at firefighting.
Information	How is this like something I already know?  Can you explain the ID system further?	Recruit is asking for additional information specific to the topic.  In some cases the recruit is asking the program to help relate new information to known information.	Information is designed to help users who need additional tutoring to understand concepts.
Role	Why is this information important to me?	Recruit is exhibiting a concern for how the activities relate to the common good. This is a typical concern for a field-dependent learner.	Information is designed to provide users with information that will help them understand their role in firefighting teams.
Remember	What exactly do I have to remember about this topic?	Recruit wants to know exactly what information is important to remember. This is a typical concern for a field-independent learner.	Information is a synopsis of the content area, which the user can use as a mental checklist for what is important to remember.

## II. EXPERIMENTAL METHODS AND RESULTS

### A. EXPERIMENTAL METHODS

The procedures for the study were drawn from the systems approach to training development and the instructional system development model. Described below are the statistical analyses performed to analyze the data, the procedures for development and evaluation of the interventions, and the procedures for revision of the Stress Profile questionnaire.

#### 1. Statistical Analysis Methods

The following statistical analysis methods were performed.

1. Independent sample t-tests were performed to evaluate female-male differences on pre-training variables.
2. A one-way analysis of variance (ANOVA) with treatment (Advance Organizer, Role Model, control) as the group classification variable was performed to assess the effectiveness of the randomization procedures. The dependent variables were Armed Forces Qualification Test (AFQT) and pre-training stress measures.
3. Paired sample t-tests were performed to describe changes in stress levels during firefighting training.
4. Analyses of covariance were conducted to provide an overall test of the effects of gender and treatment on stress and performance. Gender (female-male) and treatment (Advance Organizer, Role Model, control) were the grouping variables in these analyses. These variables were treated as fixed factors. The covariates in the analysis depended on the dependent variable being analyzed: AFQT for academic performance and pre-training scores for role ambiguity, role conflict, self-efficacy, positive mood, and negative mood. A separate analysis was conducted for each criterion variable.
5. Residualized scores were computed for each dependent variable to analyze patterns of change in more detail. The residualized scores were computed by regressing academic test scores on AFQT and each stress indicator on the corresponding pre-training score. The residualized score was the difference between the actual post-training score and the predicted post-training score. Treatment effects then were computed by determining the average residualized scores for specific groups (e.g., females receiving the Advance Organizer treatment). The analyses of residualized scores included:
  - *Analyses of variance to provide focused tests of the effects of the Advance Organizer (AO) and Role Model (RM) treatments.* In each case, a 2 x 2 ANOVA was performed with gender as one group classification variable. The other group classification variable was an AO contrast or an RM contrast. The AO contrast was constructed by combining the RM and control groups into a single group with the AO group as the second group. The RM contrast was defined the same way, except with RM in place of AO. Where appropriate, these ANOVAs were followed by t-tests for independent groups to clearly isolate which groups differed from which others. These tests are described in Section II.B, Results of Data Analysis.



- *Pearson product-moment correlations between the residualized performance score and the residualized stress scores.* The residualized performance score was an index of whether the person performed better than expected based on his or her ability (positive residual) or worse than expected (negative residual). The residual stress scores indicated whether post-training stress was higher than expected based on anticipatory scores (positive stress residual) or lower than expected (negative stress residual). Exceptionally high stress would be associated with poorer performance if the correlations were negative for role ambiguity, role conflict, and negative mood. In these cases, a positive residual implies high stress, so a negative correlation links high stress with lower than expected performance. In the cases of self-efficacy and positive mood, negative correlations would indicate that poor performance was associated with stress. This reversal occurs because lower self-efficacy and positive mood indicate stress.

## 2. Development Methods for Interventions

During Year Two of the project, the interventions were developed and the Stress Profile questionnaire was revised. The methods for development of the treatments consisted of the following tasks.

1. The AO and RM storyboards (design documents) were reviewed and approved by the Navy.
2. The lists of required media elements (graphics, video, photographs, audio) to effectively present the content were generated for the two interventions.
3. Existing videotapes were obtained from the Navy and added to those obtained at the Recruit Training Center (RTC) at Great Lakes Naval Base to incorporate realistic footage where possible in the AO and RM interventions. The incorporation of existing video added to the realism of instructional scenes. Existing video footage (approximately 14 videotapes) was reviewed for content. Specific frames were identified for use primarily in the Advance Organizer.
4. Basic database structures and variables were designed to gather user interaction data for both instructional interventions. Authorware was chosen as the programming language for the computer-based interventions and the data was saved as delimited text files that could be viewed in several types of software. (After the evaluation, Microsoft Access was used to organize the data for statistical analysis.)
5. During a two-week time period, Southwest Research Institute (SwRI) and the U.S. Navy video production crew videotaped content for the Role Model treatment at Great Lakes Naval Base. Two subject matter experts (SME) from the RTC were present for scene development and review. A damage control (DC) instructor (male), a DC-rated sailor (female), and approximately 10 recruits served as the talent. In addition to the former two sailors, six other sailors (petty officers) were also videotaped for Role Model testimonial content. SMEs performed final review of AO and RM instructional storyboards for content and accuracy.
6. The Navy video crews edited video segments and sent footage to SwRI for further identification and digitization.
7. Video footage and still photographs were digitized for use in the treatments.

8. Professional audio narration was recorded and digitized for both treatments. Three audio recording professionals, two females and one male, were chosen to record the narration for the Advance Organizer treatment, and one female narrator recorded the audio for the Role Model treatment.
9. Instructional graphics for inclusion in both interventions were produced.
10. The graphical user interface (GUI) was developed by the graphic artist and treatment development teams.
11. Treatments were programmed in Authorware.
12. Database variables were incorporated into the programs and tested for accuracy in gathering data.
13. SwRI revised the consent form and received approval from the Institutional Review Board (IRB). Revisions to the consent forms included making the form easier to read and designing it to fit on one page.
14. SwRI developed the procedures and checklists to support data collection for use during the evaluation.
15. The SwRI team traveled to the RTC at Great Lakes Naval Base for implementation of treatments.
16. The Navy computer lab was prepared for data collection. Computers were tested and "fixed" (sound cards, headphones, video replay, etc.) by Navy personnel. Treatments were installed on 46 available computers in the Fundamental Applied Skills Training (FAST) Learning Resource Center (LRC). AO was installed on 23 computers and RM was installed on 23 computers. Treatments were identified on computers labeled "AO" or "RM".
17. Implementation procedure checklists were followed during implementation to ensure consistency during the data collection effort.
18. The treatments were revised in response to data generated during the pilot evaluation. See Appendix B for a list of the changes that were made to the treatments.

### **3. Revision of Stress Profile Questionnaire**

Revision of the Stress Profile questionnaire was accomplished during Year Two of the study, prior to implementation of the interventions. A decision was made to repeat some elements of the prior exploratory analyses for the measurement structure of stress. This decision was made because some items used to measure the stresses of general recruit training did not adapt well to the specifics of firefighting training. In addition, some items were modified significantly (e.g., one ambiguity item was split into two distinct items) and three new items were added. These changes were sufficient to make it reasonable to replace the planned confirmatory analyses with more exploratory analyses.

#### **4. Procedures for Implementation of Interventions and Data Collection**

The procedures for implementation of the interventions and data collection consisted of the following tasks.

1. The data collection effort began with administration of the consent forms and Stress Profile questionnaires to the recruit participants. The recruits completed the paperwork within one hour, in a classroom located in the RTC Headquarters building (178) by division. Two integrated recruit divisions, 233 and 234, were in the classroom at the same time. Division 233 consisted of males and Division 234 consisted of females.

Recruit participants were introduced to the administrators and topic of the study. The consent forms were distributed and read to the recruits. Questions were answered, and the administrators instructed any recruits who did not wish to participate in the voluntary study, or who had extenuating circumstances, to move to another area of the classroom. (Extenuating circumstances included evening watch duty conflicts and other schedule conflicts.) The consent forms were signed by the participating recruits and collected. Of a total of 349 recruits in the divisions, 271 participated in the study. Seventy-eight (78) recruits did not participate due to extenuating circumstances.

2. After completion of the consent forms, the Stress Profile questionnaires were distributed to all the recruits who would participate in the study. Directions were provided on how to fill out the scantron forms to answer the Stress Profile questions. Recruits were shown how to fill in their Social Security number, gender, division, name, and questionnaire number (1, 2, or 3). The first student in the first row was given number one, the second student was given number two, the third student was given number three, the fourth student was given number one, and so forth. All of the students who were given the number one received the AO treatment. The students assigned number two received the RM treatment. The students assigned number three became the control group. The Stress Profile questionnaire was explained and students were instructed to answer the questions with regard to how they felt about recruit firefighting at that moment in time.
3. In order to randomly assign recruits to treatment or control groups, after the recruits completed the Stress Profile questionnaire, the scantron forms were divided into three groups in relation to the questionnaire number indicated (1, 2, or 3). The scantron forms were counted to ensure equal cell (sample) size among treatment and control groups. Group 1 was assigned to the Advance Organizer (AO) group and Group 2 was assigned to the Role Model (RM) group. In order to accommodate the number of computers available in the lab and the number of students receiving treatments, these two groups were instructed to return that evening at a designated time (5:40 pm or 7:40 pm) depending on their division. For example, Groups 1 and 2 from one division returned at 5:40 pm while Groups 1 and 2 from the other division returned at 7:40 pm. Recruits in Group 3 were instructed that they would not be taking the computer-based exercises. They were ensured that they would receive all of the same training that all other recruits received at the RTC. Group 3 recruits are the control groups for the data analysis.
4. As the recruits arrived at the FAST lab, they were instructed to sit at computers designated by a sign that read "AO" or "RM" depending on the treatment group they were assigned to. For example, recruits in Group 1 were instructed to sit at the computers labeled "AO" and recruits in Group 2 were instructed to sit at the "RM" computers. The administrators told the recruits

that there were two different computer-based applications in the lab and that they would interact with only one of them. The administrator explained that there might be a difference in the amount of time it would take them to complete the programs, based on the application and on the individuals. The administrators explained that the recruits should take their time while interacting with the program, as they had ample time (90 minutes) within which to finish. As recruits completed the program, they were directed to a classroom to wait until the entire division was finished.

Recruits were encouraged to ask questions and make comments to the administrators at any time during the program. The recruits were told that we were evaluating the system and any feedback from the recruits would be helpful toward improving the system for future uses. See Appendix A for specific comments generated by the students during the data collection effort.

5. The recruits completed the treatments. The computer screens started at the Windows 95 desktop interface with the "sign on" application highlighted. The recruits were shown how to click with a mouse and enter data using the keyboard. The administrators instructed the students as a group through the sign-on application. After the recruits were "signed on", they were instructed to begin the treatments. The administrators emphasized how important it was that the students not quit the program, because all data would be lost and would not be recoverable.
6. During the students' interaction with the program, they were reminded how much time they had left beginning at the 60-minute point. The time left was announced at 30, 20, 10, and 5 minutes. When all recruits had completed the programs and were seated in the adjacent classroom, a cross-check was performed on the names in each group and the actual treatments the students had completed. Each division had one or more persons who had sat at the "wrong" computer and were given the "wrong" treatment. This data was collected, which explains the differences in cell sizes between treatments and control groups.
7. After dismissal of the division in its entirety, the administrators prepared the lab for the next division's arrival. Administrators returned all computer screens to the Windows 95 desktop interface and inserted fresh program diskettes into the floppy drives for collection of the data for the next group of students.
8. The same procedures were followed for the next group of recruits. After dismissal of the division, the paperwork was filed, floppy disks were collected, and the computers were reset to the Windows 95 desktop interface for daytime use in the lab.

## **B. RESULTS OF DATA ANALYSIS**

### **1. Stress Measurements**

Exploratory principal component analyses were conducted for the 40 stress items. These analyses were adopted in preference to the confirmatory factor analyses planned at the time the project was initiated. The exploratory analyses were adopted as a first step because a number of items had been included in the study that were not originally designed to measure either role ambiguity or role conflict. Some new items were added to reflect comments from recruits about firefighting training. The additional items could affect the overall structure of measurement in ways that would not be evident if a selected set of models was imposed on the data. On the other hand, if the original measures of role ambiguity and role

conflict retained their structure even with these changes, the exploratory approach would still identify them. The exploratory approach, therefore, provided an opportunity to identify points at which the intended measurement model broke down, if it did, but would still recover that measurement model if it was appropriate.

The initial model provided a reasonable basis for measurement. The structure of the item set indicated the presence of more than two stress dimensions, but the close approximations to the original scales were recovered. First, the analyses indicated the presence of five eigenvalues  $> 1.00$  for both the pre- and post-training data. However, in each case, only three eigenvalues were greater than expected by chance according to the Monte Carlo results of Cota, Longman, Holden, Fekken, and Xinaris (1993). Therefore, three components were extracted.

Two of the three extracted components were close approximations to the *a priori* role ambiguity and role conflict scales. This conclusion was reached by rotating the extracted components to an orthogonal varimax solution. The rotated components were matched across solutions by determining which three items had the highest loading on each component. After matching components, an item was designated as an indicator for a component if: (a) the component loading was  $> .30$  in both the pre-training and post-training data, and (b) loading on other components was  $< .30$ .

Role ambiguity and role conflict scales were constructed by combining the original item classification with the above criteria. Items 5, 12, 13, 16, 23, 24, 25, and 28 met these criteria for role ambiguity. Seven of these eight items were designed to measure role ambiguity. Item 5 initially was designed to measure overload (Vickers & Ryman, 1980) and was included in this study as a potential indicator of role conflict. That interpretation of the item responses assumed that conflict was generated by having to choose between one of several tasks that needed to be done at the same time. In the context of firefighting, however, this item appears to measure the ability to get work done quickly because roles are clearly specified.

Items 2, 9, 15, 20, and 22 met the scale construction criteria for role conflict. These items comprised five of six items included in the analyses that originally were designed to measure role conflict.

The third component in the analysis was defined by items originally designed to measure several distinct constructs. Items that met the scaling criteria for this component originally were designed to measure role ambiguity, role conflict, teamwork, and standardization (Vickers & Ryman, 1980). The set of items lacked any clear unifying theme, and component loadings tended to be inconsistent from the pre-treatment to post-treatment period.

No scale was constructed from the items defining the third principal component in the analyses. The items with substantial loadings were primarily those included in this study in an attempt to expand the boundaries of the role ambiguity and role conflict concepts in the context of firefighting training if appropriate. Instead, the items appear to have been useful in producing narrower, more highly focused scales for role ambiguity and role conflict. A scale constructed of the items defining this component would have had no meaning in the context of the specific theoretical focus of the study. The inconsistent component loadings raise concerns about the appropriateness of constructing a scale from those items. Even if a scale had been constructed, it would have had no obvious relationship to the study hypotheses. Those hypotheses dealt with role conflict and role ambiguity. Acceptable scales for conflict and ambiguity had been identified, so the focal stresses for the research were covered.

**Table 2. Principal Components of Stress Items**

Item No.	Component: Time:	1		2		3	
		Pre	Post	Pre	Post	Pre	Post
	<b>Role Ambiguity</b>						
13	Procedures detailed	.75	.68	.18	.30	-.03	.14
28	Orders clear	.69	.67	.07	.10	.04	-.15
12	Communications clear	.67	.67	.32	.27	.07	-.05
24	Only one way to do each task	.48	.63	-.02	-.04	-.07	.08
23	Team responsibilities clear	.75	.62	.07	.21	.04	-.26
25	Goals clear	.62	.57	.21	.31	-.07	-.07
16	Explanations clear	.57	.61	.38	.36	.11	-.04
5	Recruits work fast	.39	.34	-.17	.33	.28	.02
	<b>Role Conflict</b>						
15	Rules often conflict	.07	-.15	.10	-.01	.65	.73
9	Tasks done by numbers	-.11	-.21	.22	.05	.74	.69
20	Confusion over who does which tasks	.29	.01	-.22	-.18	.54	.64
22	Difficult to keep up	.17	.07	-.37	-.26	.46	.61
2	Done differently	.07	.00	.27	.13	.53	.34
	<b>Third Component</b>						
7	Know expected standards	.21	.41	.72	.42	.11	.00
3	Recruits cooperate	.51	.19	.27	.71	.04	-.03
4	Recruits follow standard procedures	.40	-.05	.40	.70	-.14	-.02
1	Know which procedure	.11	.21	.75	.59	.18	-.07
10	Remember technical details	.33	.34	.52	.39	.05	-.06
	<b>Not Included</b>						
8	Conflicting orders common	.32	.26	.24	.48	.28	.00
17	Leader's decisions good	.69	.23	.02	.58	.12	-.09

Note: See text for description of principal component analysis and component matching procedures. "Pre" and "Post" column headings refer to pre-training and post-training data. See Appendix D for the full content of the items.

The principal component analysis produced scales suitable for assessing role ambiguity and role conflict as these constructs occur in the context of firefighting training. The role ambiguity construct is measured by items that indicate that responsibilities are clearly spelled out. Descriptive statistics for the pre- and post-training scales are given in Table 3.

**Table 3. Descriptive Statistics for Stress, Efficacy, and Distress Scales**

Scale	Pre-Training			Post-Training			$r_{tt}$	t-test	Sig.
	Mean	SD	Alpha	Mean	SD	Alpha			
Role Ambiguity	2.94	0.64	.80	2.20	0.57	.79	0.36	18.01	.000
Role Conflict	3.00	0.61	.56	2.68	0.71	.57	0.21	6.43	.000
Self-Efficacy	3.78	0.56	.58	3.92	0.53	.59	0.29	3.53	.000
Negative Mood	1.99	0.77	.80	1.74	0.75	.81	0.38	4.82	.000
Positive Mood	3.25	0.81	.82	3.40	0.89	.80	0.52	3.01	.003

Note: Table entries were computed for participants with stress and mood data for the pre- and post-training sessions. The sample size was  $n = 277$  except for negative mood ( $n = 265$ ) and positive mood ( $n = 267$ ). Alpha is Cronbach's internal consistency estimate of reliability. " $r_{tt}$ " is the correlation of the pre-training scores with the post-training scores (Nunnally & Bernstein, 1994, pp. 233-236).

Firefighting training decreased stress. Role clarity increased during training from a pre-training average rating very close to the "Neither Agree Nor Disagree" anchor of the rating scale (i.e., 3) to near the "Agree" anchor (i.e., 4). Role conflict dropped from an anticipatory mean value of "Neither Agree Nor Disagree" to a post-training rating about one-third of the way from the original rating and "Disagree" (i.e., 2).

#### *a. Self-Efficacy*

Self-efficacy measures the person's perception that he or she can master the tasks required in firefighting training. Self-efficacy scores also include the perception that the tasks can be performed with relative ease and/or with simple persistence.

Eight items in the Stress Profile questionnaire were designed to measure self-efficacy. Principal component analysis indicated the presence of a small second factor in these items, but the total set of items was used to measure the construct. This procedure corresponded to the concept of generalized self-efficacy that was the basis for the development of the self-efficacy items. The resulting scale had a rather low, but marginally acceptable, internal consistency estimate of reliability (cf. Table 3).

Average self-efficacy increased, but the gain was modest. The initial rating was approximately three-fourths of the distance from "Neither Agree Nor Disagree" to "Agree." The final rating was approximately nine-tenths of the distance. The absolute average gain (0.14 rating points) translated to an effect size of 0.25 using the pre-training standard deviation (SD) as the frame of reference. This change represents a small effect (Cohen, 1988) in the predicted direction.

All of the differences between anticipatory stress and post-training stress were comparable for females and males. None of the gender by time interactions was statistically significant ( $p > .117$  for each).

#### *b. Positive and Negative Moods*

Mood assessment consisted of 12 items, six selected to measure negative mood and six selected to measure positive mood. Extensive prior research indicates that these two general dimensions provide a

useful summary of mood (Watson & Tellegen, 1985). Vickers and Hervig (1987) showed that this model, applied to military personnel, was not merely a response style artifact; it extracted the valid variance from mood reports in this population.

Given the selection of items, it was anticipated that the mood items would produce two clear dimensions. Principal components analysis produced only two eigenvalues  $> 1.00$  in both the pre-treatment and post-treatment data (Pre-treatment eigenvalues = 4.13, 2.29, 0.90; Post-treatment eigenvalues = 3.94, 2.72, 0.88).

The component loadings confirmed the expected mood structure (Table 4). The six negative mood items defined a single dimension in each analysis; The six positive mood items defined the other dimension. Based on this evidence and the prior studies of mood structure, the items were combined to form the *a priori* scales planned for positive mood and negative mood. The resulting six item scales had acceptable reliability (cf. Table 3).

**Table 4. Principal Components Structure of Affective Distress**

Item		Component 1		Component 2	
		Pre	Post	Pre	Post
37	Sad	.78	.83	-.07	-.07
33	Blue	.74	.70	-.18	-.11
35	Angry	.73	.78	-.06	.00
38	Annoyed	.68	.82	-.09	.02
32	Uneasy	.68	.58	-.02	.02
29	Depressed	.66	.68	-.23	-.26
39	Happy	-.17	-.17	.79	.80
40	Energetic	-.16	-.14	.79	.79
31	Cheerful	-.12	-.07	.79	.77
36	Active	-.16	.04	.70	.74
34	Satisfied	-.24	-.19	.60	.68
30	Vigorous	.27	.13	.56	.57

Note: The number in front of each adjective indicates the item number within the Stress Profile questionnaire.

Moods were positive overall prior to firefighting training, but improved further during firefighting training. The assertion that moods initially were positive overall is based on the observation that the average rating for positive mood was slightly above the "Neither Agree Nor Disagree" rating (3.25), while the average rating for negative mood was close to the "Disagree" anchor point (1.99).

The inference that mood improved during firefighting training is based primarily on a drop in the level of negative mood. The average rating for negative mood dropped one quarter of a point to a value one-fourth of the way between "Disagree" and "Strongly Disagree." Using the pre-training mood as the reference, this change amounted to a small effect size ( $ES = 0.32$ ).



The inference that mood improved was supported by a marginal trend toward increased positive mood. The average positive mood rating increased by approximately one-seventh of a rating point (0.15). Whether this increase in positive mood should be regarded as a useful indicator of change during firefighting training is uncertain. The change was statistically significant ( $p < .003$ ), but the effect size was smaller than that for negative mood ( $ES = 0.19$  vs.  $ES = 0.32$ ). The positive mood effect size fell just below Cohen's (1988) recommended minimum for an important effect (i.e.,  $ES = 0.20$ ).

## **2. Evaluation of Pre-Training Status**

### ***a. Randomization Effects***

Study participants were randomly assigned to treatment groups. While the procedures followed should have produced comparable groups, differences might have arisen by chance. For this reason, analyses would benefit from the introduction of appropriate controls for those variables that were unevenly distributed across the treatment conditions.

A one-way analysis of variance was conducted to verify that the experimental groups were comparable. The analysis compared the three treatments. Measures that described the individuals prior to treatment were the dependent variables.

The treatment groups did not differ significantly on any pre-treatment variable. This statement was true for Armed Forces Qualification Test (AFQT) ( $F_{2,274} = 0.17, p < .849$ ) anticipated role clarity ( $F_{2,289} = 0.98, p < .377$ ), anticipated role conflict ( $F_{2,289} = 1.54, p < .216$ ), and anticipated self-efficacy ( $F_{2,289} = 0.86, p < .427$ ). AFQT is a general indicator of intelligence. Similarly, the treatment groups reported comparable initial levels of affective distress, including both negative affect ( $F_{2,280} = 1.40, p < .249$ ) and positive affect ( $F_{2,280} = 0.54, p < .583$ ). Clearly, the treatment groups were well matched with respect to mental ability, anticipated stress, and initial affective stress status.

### ***b. Gender Differences in Ability***

Females (mean = 61.54, SD = 19.54) scored higher on the AFQT than males (mean = 55.94, SD = 20.76). This difference was only marginally significant statistically ( $t = 1.93, 274 \text{ df}, p < .056$ ) using a two-tailed significance test. A two-tailed test was appropriate because no *a priori* prediction had been made regarding the direction of gender differences in mental ability.

### ***c. Gender Differences in Anticipated Stress***

The stress measurements taken prior to firefighting training are best regarded as measures of anticipated stress. These measures asked recruits to indicate what they believed the firefighting training would be like. This perception presumably was based on the recruits' prior experiences in basic training, prior beliefs about the nature of the course, and so on. These initial stress perceptions obviously were not reports of any actual experience in firefighting training. For these reasons, it was desirable that the initial ratings be differentiated from the actual stress experienced during the training. The label "anticipatory" was applied to provide this differentiation.

Females and males had comparable anticipations about stress in firefighting training (Table 5). Differences between the two groups were not statistically significant for role ambiguity, role conflict, self-efficacy, and negative mood. Females reported slightly higher levels of positive mood, but this

trend was only marginally significant using a two-tailed significance test. A two-tailed significance test for the difference in positive mood scores was appropriate given the observed direction of the difference. The initial expectation was that females would have higher stress levels (i.e., less positive mood in the case of this indicator).

**Table 5. Pre-Training Gender Differences**

Scale	Females Mean	SD	Males Mean	SD	t	Sig.
Role Ambiguity	2.72	0.68	2.65	0.65	0.79	.433
Role Conflict	2.95	0.66	3.02	0.60	0.83	.405
Self-Efficacy	3.79	0.49	3.77	0.57	-0.33	.744
Negative Mood	1.94	0.68	1.76	0.77	0.88	.381
Positive Mood	3.42	0.77	3.20	0.82	-1.95	.052

### 3. Evaluation of Post-Training Status

#### *a. Academic Performance*

The average female (mean = 3.94, SD = 0.44) scored lower on the examination than the average male (mean = 4.15, SD = 0.45). The difference was statistically significant ( $t = 3.56$ , 296 df,  $p < .001$ ). The lower average score for females was obtained even though they had higher than average AFQT scores. Because higher AFQT scores generally were associated with higher examination scores ( $r = .400$ ,  $t = 7.23$ ,  $p < .001$ ), females' higher average AFQT scores led to the expectation of higher than average performance on the firefighting examination.

A regression equation was developed to explore female-male differences in examination performance adjusting for the difference in general mental ability. The equation was

$$T' = 3.613 + (.00871 * AFQT)$$

where  $T'$  is the predicted test score.

An adjusted test score ( $T_{adj}$ ) was computed to measure performance controlling for ability. This score was computed by subtracting the predicted test score from the observed test score (i.e.,  $T_{adj} = T - T'$  where  $T$  is the test score). The adjusted scores were positive if performance was higher than expected given the person's ability level, and negative if performance was lower than expected.

#### *b. Treatment Effects on $T_{adj}$*

Treatment effects on academic performance were evaluated by comparing the  $T_{adj}$  scores of females and males within each treatment group. The comparison of females and males in the control group supported the initial claim that females perform relatively poorly in this component of basic training. The average score for females (mean =  $-.226$ ) was lower than that for males ( $.085$ ) as expected.

Absent any treatment, therefore, the female-male difference in test performance was  $d = -.311$ ; this difference was statistically significant ( $t = -3.24$ , 86 df,  $p < .001$ , one-tailed).

The RM treatment did not improve females' performance on the firefighting examination. Females who received this treatment still scored below average after adjusting for their general mental ability (mean =  $-.240$ ). Males who received this treatment had scores that were, on the average, virtually identical to their predicted scores (mean =  $.019$ ). The difference between females and males ( $d = -.259$ ) was only slightly smaller than that under the control conditions ( $d = -.311$ ). Females and males still differed significantly on performance in this treatment ( $t = -2.64$ , 88 df,  $p < .005$ , one-tailed).

The AO treatment improved females' performance on the firefighting examination. Females in this treatment scored only slightly below the level expected based on their AFQT scores (mean =  $-.074$ ). This deficit was only one-third to one-fourth that found in the control group and the recruits receiving the RM treatment. Males who received the AO treatment scored slightly higher (mean =  $.095$ ) than expected based on their AFQT scores. The difference between females and males, therefore, remained moderately large ( $d = .169$ ), but was reduced in size relative to that in other treatments. The remaining female-male difference was not statistically significant ( $t = 1.61$ , 85 df,  $p < .056$ ).

The AO treatment effect is placed in perspective by several comparisons. To begin with, the female-male difference in this treatment was only about one-half that in the control group ( $d = -.169$  vs  $d = -.311$ ). The trend toward a smaller gender difference for the AO group was consistent with the hypothesis that this treatment would improve female performance relative to male performance. However, although the trend was in the predicted direction, it was only marginally significant (difference =  $.142$ ,  $t = 1.34$ ,  $p < .092$ , one-tailed).

Comparing the two treatments, each treatment reduced the performance deficit in females, but the AO treatment was more effective. The AO treatment cut the performance deficit for female recruits by 46% compared to a reduction of only 17% for RM. Given the small sample sizes in the present study, the AO gain was only marginally significant, but the RM gain did not even approach significance.

### *c. Treatment Effects on Stress*

Treatment effects on stress were estimated using anticipated stress as a covariate. This procedure was used instead of a repeated measures analysis. The repeated measures analysis assumes that the stress scales measured the identical construct at both the pre- and post-training administrations. This assumption was questionable on logical grounds for the stress and efficacy scales. In these instances, the post-training scores reflect perceptions and feelings based on actual experiences in firefighting training. Recruits cannot reasonably be expected to know accurately what those experiences will be prior to training. Pre-test variables, therefore, must reflect generalization from other parts of basic training, generalized tendencies to perceive stress, trait elements of mood, or other similar factors. Arguably, the measurements taken at the two times represent distinct constructs (e.g., capacity for stress vs. actual stress), in which case a difference score such as that which would be evaluated in a repeated measures design is difficult to interpret. Using the pre-training scores as covariates of the post-training scores can be seen as a method of adjusting for the continuing influence of those factors that determined the individual differences in anticipation. Removing the effects of those factors should leave a purer indication of the effects of training on stress.

Mood scores presumably measured the same constructs at both testing times. These scales, therefore, could reasonably have been evaluated using a repeated measures analysis of variance. The analysis of covariance was employed for these distress scales to make those analyses comparable to the analyses for the other stress indices.

Table 6 summarizes the findings for stress as a function of gender and treatment group controlling for anticipatory stress. The only significant main effects were those obtained for gender and treatment on role conflict. These effects were present because females experienced less conflict than males, and the Role Model treatment was associated with less conflict. The estimated mean score adjusted for pre-training anticipatory conflict was 2.50 (SE = .08) for females compared to 2.74 (SE = .05) for males. The corresponding estimates for the treatments indicated that the RM treatment had the lowest value (mean = 2.52, SE = .08) followed by the control group (mean = 2.65, SE = .09) and the AO treatment group (mean = 2.69, SE = .08). The primary difference between treatment groups appeared to be the contrast between the extreme groups. The 95% confidence intervals for the RM treatment group (2.36, 2.68) did not include the mean for the AO group; the 95% confidence interval for the AO treatment group (2.54, 2.85) did not include the mean for the RM treatment group.

**Table 6. Treatment Effects on Stress Indicators**

Scale	Gender		Treatment		Gender x Treatment	
	F	Sig.	F	Sig.	F	Sig.
Role Ambiguity	1.50	.22	0.03	.973	0.26	.774
Role Conflict	11.56	.001	6.45	.012	1.22	.298
Self-Efficacy	0.37	.542	2.07	.128	2.35	.097
Negative Mood	0.47	.495	0.72	.487	1.55	.215
Positive Mood	0.57	.451	0.66	.518	0.30	.738

#### *d. Extended Analysis of Interactions*

Table 6 also indicated the presence of one marginally significant interaction between gender and treatment. This marginal effect was examined in more detail because the interaction was a diffuse significance test (i.e., a test involving more than one degree of freedom; cf. Rosenthal & Rosnow, 1984). In this case, one or more meaningful differences might be concealed because they were mixed with a number of other trivial differences. Given that this phase of the study was only an initial test of the treatments, exploration of this possibility was reasonable.

The interactions between gender and treatment approached significance in the omnibus analyses for the adjusted examination score and self-efficacy. Examination of the average scores in the different treatments suggested that this circumstance occurred because the treatments had very specific effects on females. Despite the weakness of the trends for these differences, further evaluation was appropriate given the preliminary character of the study. The results of the evaluation will direct future refinements of the treatments.

### *(1) Self-Efficacy*

Examination of the mean scores for self-efficacy suggested that the RM treatment was the primary source of the treatment  $\times$  time interaction for this variable. In general, females and males had comparable levels of anticipated efficacy in firefighting training. Post-training efficacy generally was comparable for females and males adjusting for anticipated efficacy. However, females who received the RM treatment showed exceptionally high self-efficacy after firefighting training.

An adjusted self-efficacy post-training score was computed. Self-efficacy was prior to firefighting training and after firefighting training. The difference between the predicted and observed post-firefighting training scores provided the adjusted post-training score. Given that anticipated self-efficacy quite probably reflected a generalized self-efficacy based on general life success and success to that point in basic training, the adjusted post-firefighting training self-efficacy score can be interpreted as an index of situation-specific self-efficacy scored as a deviation from generalized self-efficacy.

Combining the AO and control groups into a single group, recruits receiving the RM condition could be compared to all others. The resulting  $2 \times 2$  ANOVA indicated that the RM treatment had a significant main effect ( $F_{1,273} = 4.18, p < .042$ ), but there also was an interaction of gender with treatment status. The average adjusted scores indicated that treatment status had little average effect for males (RM = .01; Others = .02). Among females, the RM treatment was associated with higher adjusted self-efficacy (0.18). Other treatments led to lower self-efficacy (-0.13). The difference between the two groups of females was statistically significant ( $t = 2.24, p < .028$ ) and translated to a moderate effect size (ES = 0.50).

### *(2) Negative Mood*

The existence of a significant effect of the RM treatment on one psychological stress indicator motivated a search for other indicators with a similar pattern. Examination of the average pre-training and post-training scores also suggested that the same pattern contrasting the RM treatment with the AO treatment and controls was present for negative mood. In this case, the interaction effect for the original  $2 \times 3$  ANOVA was not even marginally significant ( $p < .215$ ; cf. Table 6), and even the interaction for the  $2 \times 2$  ANOVA was only marginally significant ( $F_{1,261} = 2.78, p < .097$ ).

The negative mood differences were of interest despite their weak statistical significance because they paralleled the self-efficacy differences. Once again, the RM treatment had little effect on males (RM = .07; Other = -.01) and a positive effect on females (RM mean = -.24; Others mean = .04). The difference between females receiving the RM treatment and other females was statistically significant ( $t = 1.76, 67 \text{ df}, p < .042$ , one-tailed). A moderate effect size (ES = .43) was evident.

### *(3) Examination Performance*

Group differences in examination performance were explored in more detail using  $T_{\text{adj}}$  as the criterion measure. The group means from the gender  $\times$  treatment analysis indicated that the AO improved this outcome for females. Females who received the AO treatment had examination scores that were only slightly less than the score that would be predicted based on their AFQT scores (Avg. = -.07, SD = .39). The hypothesis that the true mean score for females receiving this treatment is zero (i.e., that the females receiving this treatment performed up to the level expected based on their mental ability) cannot be rejected ( $t = -0.82, 20 \text{ df}, p < .211$ , one-tailed). Females who did not receive the AO

treatment scored below their predicted performance (mean =  $-.23$ , SD =  $.37$ ,  $n = 40$ ). This deficit was significantly below zero ( $t = 3.93$ , 39 df,  $p < .001$ ). The performance deficit in these females was lower than that for females who received the AO treatment, but the difference was only marginally significant ( $t = 1.58$ ,  $p < .061$ ).

Comparing females to males who received the same treatment also illustrates the potential value of the AO for improving females' academic performance. Among those receiving no treatment (i.e., the control condition), males performed significantly better than females (male mean =  $.09$ ; female mean =  $-0.23$ ;  $t = 3.24$ , 86 df,  $p < .001$ , one-tailed). The same trend was evident in the RM treatment (males =  $0.02$ ; females =  $-0.24$ ;  $t = 2.64$ , 88 df,  $p < .005$ , one-tailed). The female-male difference was substantially smaller and only marginally significant statistically in the AO condition (males =  $0.10$ ; females =  $-0.07$ ;  $t = 1.61$ ,  $p < .056$ ).

Expressing the impact of the AO on academic performance as an effect size provides another perspective on the effectiveness of this treatment. On the average, the adjusted score for females in the control and RM groups was 0.29 points lower than that for males in the same treatments. The comparable difference was 0.17 between female and male recruits receiving the AO treatment. Stated this way, the AO provided an improvement of 0.12 points relative to males receiving the same treatment. This gain represents an effect size of  $ES = 0.30$  using the pooled SD for all males as the denominator for the computation. This ES value is near the middle of Cohen's (1988) small effect size range.

#### **4. Individual Differences in Stress and Performance**

The analyses described thus far examined group differences in stress and performance. Those analyses compared average scores for different groups, and treated individual variation within groups as error variance. This approach did not test for possible associations between individual differences in stress and individual differences in performance. Given that it is individuals who actually perceived stress and performed on the examination, the grouping process may have been somewhat misleading. Additional analyses, therefore, were undertaken to examine associations between stress and performance with the individual as the unit of observation.

The additional analyses evaluated the hypothesis that stress affects performance by  $T_{adj}$  to adjusted stress scores. The adjusted scores corrected post-training stress and distress reports for the effects of pre-training anticipatory stress and distress. Table 7 shows the results of these analyses for the full sample, all females, all males, all participants in the control group, all participants in the AO treatment, and all participants in the RM treatment.

##### **a. Full Sample**

Anticipatory stress was not related to  $T_{adj}$  ( $r = .007$  to  $r = .066$ ). Adjusted post-training scores generally were unrelated to  $T_{adj}$ , but good performance was associated with a larger than expected decrease in negative mood ( $r = -.14$ ,  $p < .024$ ).

**Table 7. Adjusted Stress Scores as Predictors of Adjusted Academic Performance**

Scale	Total Sample	Females	Males	Control	Advance Organizer	Role Model
Role Ambiguity	.006	.035	.011	-.023	.037	.008
Role Conflict	-.023	.178	-.134	-.047	.001	-.053
Self-Efficacy	-.007	-.136	.032	.117	.021	-.156
Negative Mood	-.144*	.016	-.208**	-.323**	-.094	-.242*
Positive Mood	-.067	.149	-.108	-.046	-.130	.008

\* $p < .05$     \*\* $p < .01$

Note: Sample sizes varied slightly depending on the amount of missing data for the different measures. The ranges of sample sizes were: Total Sample = 247–259; Females = 58–61; Males = 189–198; Control = 82–86; Advance Organizer = 82–85; Role Model = 83–88.

#### ***b. Gender***

It was thought that gender might affect the associations between stress and performance. However, gender comparisons produced ambiguous results. First, the  $T_{adj}$ -negative mood association was limited to males ( $r = -.21$ ). This association was essentially zero among females ( $r = .02$ ). However, the difference between the correlations was only marginally significant statistically ( $z_{diff} = 1.48$ ,  $p < .070$ ) using the Fisher  $r$ -to- $z$  transformation (Hays, 1963, p. 532). This result was ambiguous because a simple “Is the association significant in both groups?” test for differences would lead to the inference that the groups differed while asking “Are the two correlations significantly different?” which would lead to the inference that the females and males did not differ.

The results for a second correlation were ambiguous because they demonstrated the opposite pattern. Among females, adjusted role conflict was positively related to academic performance ( $r = .178$ ). Among males, the correlation was negative ( $r = -.134$ ). The *difference* between these correlations was statistically significant ( $z_{diff} = 2.20$ ,  $p < .014$ ), but neither of the individual correlations was significant. Thus, the data indicated a significant difference from one perspective while making it impossible to rule out the following equality:  $r_{females} = r_{males} = .00$ .

The fact that the determination of statistical significance is dependent on the establishment of a significance criterion adds to the ambiguity of the role conflict- $T_{adj}$  correlations for females and males. The observed difference was labeled “significant” using the common  $p < .05$  criterion. However, role conflict was one of five potential predictors of academic performance considered in the analysis. Conservative significance testing would apply a Bonferroni adjustment to maintain the experiment-wide error at  $p < .05$  (Harris, 1985, pp. 7-9). In this case, the significance criterion would move to  $p < .01$ ; the observed result would be classified as nonsignificant using that criterion. Given these additional considerations, the evidence for female-male differences in stress-test performance relationships is equivocal.

### *c. Treatment*

Treatments also could affect stress-performance relationships. This possibility received some support from comparisons for negative mood. Adjusted negative mood was significantly related to adjusted academic performance in the control ( $r = -.323$ ,  $n = 82$ ,  $p < .003$ , two-tailed) and RM ( $r = -.242$ ,  $n = 83$ ,  $p < .028$ , two-tailed) treatment groups, but not the AO group ( $r = -.094$ ,  $n = 82$ ,  $p < .401$ ). The differences appear to be substantial, but they are not statistically significant. Comparing the AO treatment to the control group, the difference approached significance ( $z_{diff} = 1.51$ ,  $p < .132$ , two-tailed). The difference between the AO treatment and the RM treatment did not even approach significance ( $z_{diff} = 0.96$ ,  $p < .338$ , two-tailed). Two-tailed significance tests were reasonable in these comparisons because there were no *a priori* hypotheses about the location and direction of the differences tested. These results were ambiguous in the same way that the gender difference in the negative mood- $T_{adj}$  relationship was ambiguous.



### **III. DISCUSSION**

The initial evaluation of the new instructional technologies supports several general conclusions. The results confirm that females experience more difficulty than males in learning the classroom material in firefighting training. The results indicated that the AO treatment reduced the relative deficit in academic performance, but the RM treatment did not. In contrast, the results indicated that the RM treatment had some positive effects on distress and efficacy, but the AO treatment did not.

The evidence provided no reason to believe that stress was a mediator of academic performance, but no inference could be drawn about stress and leadership or team performance because suitable criteria were not available. Finally, preliminary descriptions of the patterns of individual interactions with the AO treatment were identified that may provide a basis for improving the treatment. Each of these points is considered in more detail in the following paragraphs.

#### **A. PERFORMANCE OF FEMALES**

Females did relatively poorly on the academic test. The control group provides the best estimate of this deficiency as it currently exists in training because these females essentially received the same treatment that recruits in general receive at present. The average adjusted score for the females in the control group was  $-.23$ . This figure was  $0.58$  standard deviation below the average adjusted score for males. The difference represents a moderately large effect size in behavioral research (Cohen, 1988). This evidence quantifies the size of the problem being addressed with greater precision than was possible at the study outset.

#### **B. EFFECTS OF TREATMENT**

##### **1. Advance Organizer Treatment Effect**

The AO treatment improved the academic performance of female recruits. A slight performance decrement relative to ability still was evident in this group (mean =  $-.07$ ), but the deficiency was less than one-third the size of that noted in both the control and RM treatment groups. Furthermore, statistical tests indicated that the observed AO deficiency was not significantly different from zero or significantly different from that of males going through the same treatment. The overall pattern of findings indicates that the AO treatment reduces the female academic performance deficiency and may eliminate it altogether.

##### **2. Role Model Treatment Effect**

The RM treatment did not affect academic performance, but this result was not surprising. The RM treatment was designed to improve performance in the hands-on portion of firefighting training. The emphasis on teamwork and leadership was expected to be rewarding when recruits had to communicate and work together to put out fires. The project was undertaken with the belief that suitable hands-on firefighting measures would be available to assess individual differences in performance. These measures were not developed. The improved sense of efficacy and better mood at the end of training suggest that female recruits who went through the RM treatment felt they did better. Recruits' spontaneous comments (see Appendix A) also suggested they felt this was a useful treatment. Thus, it seems likely that RM affected performance, but not in the areas that could be directly measured.

### **3. Hawthorne and Placebo Effects**

The fact that the RM and AO treatments affected different outcomes is important. The AO treatment affected academic performance, while the RM treatment affected stress. This difference helps rule out a Hawthorne effect (Shaughnessy & Zechmeister, 1985, pp. 336-338) or placebo effect as the explanation for the treatment effects. A Hawthorne effect would occur if simply giving some people more attention resulted in improved performance. A placebo effect would occur if a treatment effect was present only because the recruits receiving the treatment believed it would affect them. In the present case, there was no reason for recruits to believe that one treatment would be useful, but the other would not. Given these assumptions, both groups received comparable attention and received treatments that they believed would be efficacious. Neither assertion applied to the control group. The result is that the placebo and Hawthorne effect interpretations both would differ from the control group, but would be comparable to one another. A pattern of differential effects for the AO and RM treatments is contrary to these expectations.

### **4. Differential Treatment Effects**

The differential effects for the AO and RM treatments become more plausible when it is noted that these effects occur where they might be expected to occur, based on the nature of the treatments. The AO treatment was designed to prepare a cognitive basis for learning academic materials. The RM treatment illustrates patterns of interpersonal interaction and behaviors that are basic to role communication and role enactment and, therefore, are basic to the occurrence of role ambiguity and role conflict. The AO treatment effect may be the result of changes in the cognitive processes involved in learning the academic material in firefighting. The RM treatment may modify the stress perceptions and other psychological reactions to firefighting training that develop out of the teamwork component of training. Taken together, these considerations help rule out nonspecific causal explanations (e.g., Hawthorne and placebo effects) in favor of causal explanations based on the specific content of the treatments. The pattern of results, therefore, provides a basis for inferring that the treatments did in fact cause the differential performance and stress effects observed in this study.

### **5. Stress Effect**

Stress reduction was not associated with improved academic performance. This inference is based on the lack of connection between stress and performance. First, the AO treatment improved females' academic performance, but did not reduce stress. Second, the RM treatment reduced some stresses, but did not improve academic performance. Third, individual differences in stress were not related to individual differences in performance. The only suggestion of a relationship was that negative mood and  $T_{adj}$  were significantly related. However, that association could be explained as well by assuming that poor academic performance led to increased depression, anger, and so on. Also, even the association between negative mood and  $T_{adj}$  was absent in the one treatment that actually modified academic performance (i.e., the Advance Organizer treatment). Exploratory analyses suggested that the relationships between stress and academic performance might differ for males and females or between different treatment groups, but chance sampling variation could not be completely ruled out as a basis for those differences.

The RM treatment reduced stress among females. Females receiving the RM treatment showed gains in self-efficacy and reduced negative mood at the end of firefighting training. Because males and females were comparable on these two measures at the beginning of firefighting training, these changes mean that

females in the RM treatment stood out as being lower on these stress indicators relative to all other males and females.

Females and males generally reported comparable stress levels. The only significant difference between genders was for females to report lower role conflict after firefighting training. Given evidence that females possess personality characteristics associated with reporting more negative affect (Feingold, 1994), females might have been expected to have higher negative mood and perhaps lower positive mood. However, in this setting, the difference was not evident.

The finding that females and males experience comparable stress levels is consistent with prior research (Martocchio & O'Leary, 1989). Other reviewers have suggested that females report more affective stress than males (Jick & Mitz, 1985). However, the effect sizes involved were not reported in that review, and the sample sizes for the majority of the studies were quite large ( $n > 700$ ). This evidence may point to a general tendency toward higher affective stress in females, but the difference could be trivial. Furthermore, the recruit situation is different from the general population in that males and females have the same roles, face the same living situations, etc. Even if female-male differences in affective stress are present in the general population, the differences might disappear if the two groups were equated for occupational status, education, family situation, and other factors as they are, to a great extent, in basic training. A general belief that females are more susceptible to stress than males may exist. If so, based on the results of this study, that belief appears to be a misleading stereotype.

### **C. LIMITATIONS OF PRESENT STUDY**

Sample size and contamination were two main limitations in the present study. Research during Year Three of the study will address these limitations.

#### **1. Sample Size**

Initial findings are based on small sample sizes that provided the intended preliminary evaluation of the treatments. The analyses frequently explored marginally significant trends in the data without allowing for the extent to which these explorations could capitalize on chance. This approach was appropriate for a preliminary evaluation that was intended to provide information useful for refining the study hypotheses. Strict adherence to traditional significance testing criteria combined with broad general hypotheses might have resulted in important effects being overlooked by using diffuse significance tests. However, the approach taken here can be interpreted only as establishing a set of refined working hypotheses for further study. The findings need to be replicated with larger sample sizes and drawing on recruits who go through training at different times of the year. The latter requirement arises because important recruit qualities change over the course of the year. The effectiveness of the treatments could depend on one or more attributes of recruits. It is impossible to say *a priori* whether the recruit differences will increase or decrease the effectiveness of the treatments.

The sample size in the initial study was also too small to study the effects of the individual differences in learning style. Such differences may impact the effectiveness of the AO treatment. Preliminary evidence was gathered this year (see Appendix D for data tables) that indicates the existence of individual differences in how people interact with the computer in this condition (e.g., choosing the linear approach versus the concept map, the number of questions asked, the types of questions asked, etc.). These differences may influence how well the recruits learn firefighting material. If so, studying the effects of the differences on performance could provide helpful clues for refining the AO treatment

to improve its overall effectiveness. General principles relevant to all types of technical training might be identified, but it is too early to tell. This problem will be overcome by increasing the sample size, quantifying differences in the pattern of interaction with the computer, and relating those differences to performance outcomes.

## **2. Contamination**

Some contamination may have occurred in the original study design because of shared interest on the part of recruits and instructors. "*Contamination* occurs when there is communication of information about the experiment between groups of subjects" (Shaughnessy & Zechmeister, 1985, p. 335, italics in the original). Each division studied included recruits who were exposed to the AO, RM, and control treatments. Recruits in the control group knew that others were receiving the experimental treatments. Instructors were concerned that materials learned in the treatments would help only some of the recruits in their division when all of the recruits could potentially benefit. Anecdotal evidence indicates that exposure to the treatments stimulated recruits to change their behaviors in several ways, including asking more questions in later parts of classroom training and participating more actively in discussions. These behaviors changed the nature of subsequent learning opportunities not only for the recruits within a particular treatment, but also for all the other recruits in their division. This type of contamination may have acted to influence treatment effectiveness. The potential contamination problems will be minimized during next year's data collection by changing the research design so that a single treatment will be administered to all recruits within a division or within paired divisions.

## IV. RECOMMENDATIONS

There are four main recommendations for future research, as described in the following paragraphs.

- **Focus on Advance Organizer Treatment**

The AO treatment will be the primary focus of the next year's work. This treatment demonstrated a sizable effect on academic performance, a meaningful criterion for training personnel. That demonstration needs to be replicated. Preliminary evidence was obtained indicating that different people interact differently with this treatment. The small sample size makes it impossible to say whether differences in the interaction pattern affect the outcome from exposure to this treatment. The sample size needs to be increased for this treatment in order to permit more detailed analysis of the relationship between patterns of interaction and treatment effectiveness.

Replication of the RM treatment will not be implemented. While the RM treatment appeared to be effective, the effects on behavioral variables cannot be demonstrated in the current firefighting training context. For this reason, it is not possible to directly demonstrate that the treatment has a positive effect on outcomes that are central objectives of basic training. Reduced stress may be good, but it is valuable in a training context primarily if it demonstrates a positive effect in achieving learning objectives. The stress effects provide reason to believe that the RM treatment can affect training outcome criteria, but sound behavioral assessments of leadership and/or team effectiveness would be required to extend this work. Such measures could be developed, but even then the highly structured, carefully controlled setting of firefighting training might be a poor place to examine these effects. Recruit comments suggest that other situations, such as Service Week, provide more extensive leadership and team performance opportunities. Some recruits commented that they felt this treatment would have helped them during that time period. However, developing this line of inquiry is beyond the scope of available resources for this project. The RM treatment should be given consideration for further research if more resources become available, but until then, the benefit seems greater for focusing on the AO treatment.

- **Reduce Contamination**

The research design will be modified to eliminate possible sources of treatment contamination. The initial design was guided, in part, by a desire to gather useful information on both AO and RM treatments with as little intrusion into training as possible. Based on the initial findings, we will implement a revised design that exposes all of the recruits in a division to a single treatment. The control group will be comprised of recruits from divisions who go through the regular training schedule with no treatment.

- **Evaluate Individual Differences in Learning Style**

Research during Year Three of the study will capitalize on the opportunity to examine individual differences in learning style. Demographic, academic and educational variables will also be assessed for their role on how academic data is assimilated and how it impacts the curricular successes of male and female recruits. Students interact with the AO treatment in a manner that is consistent with their individual learning styles. AO interaction is defined as selection of method (concept map or linear) and selection of questions within the AO treatment. By evaluating individual differences in learning styles, we will gain insight into which strategies are the most

successful at preparing students of different genders, ethnicity, education, intelligence, and age for the academic portion of the course.

Two more data collections will be conducted. The first will provide information to better quantify individual differences in patterns of interaction with the AO. This data will increase the sample size sufficiently to estimate the influence of these patterns on academic proficiency. The second study will replicate those findings and might involve some modifications to the AO treatment itself. The timing of the two data collections will be chosen to verify that the AO effect is present for recruits who enter the service at different times of year.

- **Evaluate Gender Differences in Stress-Performance Associations**

Stress assessments will be retained as part of the Year Three design. Although the overall evidence from this study suggests that stress and performance were not generally related, the comparison between the AO and control groups appears to be the most likely place to find an exception to this generalization. Among controls, poor performance was associated with more negative mood at the end of firefighting training. Receiving the AO treatment appeared to reduce this effect, but the trend was only marginally significant. Replication of the initial finding is needed to determine whether this difference indicates an effect of AO. Also, the evidence suggested that females and males differ with regard to stress-performance relationships. Perhaps this difference exists primarily in specific treatment conditions. The sample sizes in the present study were too small to evaluate gender differences in stress-performance associations within specific treatments. Increasing the sample size for the control and AO groups will permit more detailed analysis of this possibility.

## V. CONCLUSIONS

The work conducted during the past year included implementation of two instructional treatments and an initial evaluation of their effectiveness. In summary, the initial results indicate that the three null hypotheses postulated for this study were disproved.

- **First Null Hypothesis**

*Providing women with models of effective performance will not reduce stress and will not improve job performance.*

Initial findings are contrary to this hypothesis. The results indicate that both the AO and RM treatments have positive effects, but the two treatments produce effects in different areas. The RM treatment had some positive effects on distress and efficacy. Female recruits were found to feel better about themselves and had a decrease in negative mood. The RM treatment focused on the behaviors required in actual firefighting, and these behaviors and the related group dynamics are fundamental to the psychological constructs of role ambiguity and role conflict. The RM treatment fostered self-efficacy by providing models of people who succeeded in firefighting training.

- **Second Null Hypothesis**

*Providing women with aids to structure the learning process will not reduce stress and will not improve job performance.*

Initial findings disproved this hypothesis. The AO treatment did improve learning for females by providing a structure for acquiring and storing technical material. This treatment is linked to stress only indirectly in that stress is reduced when greater knowledge reduces role ambiguity and role conflict and improves the person's sense of self-efficacy. However, stress apparently is not important in the processes linking the AO treatment directly to improved learning. While female recruits were projected to have higher scores in academic tests because of their higher Armed Forces Qualification Test (AFQT) levels, they scored lower than their male counterparts. Academic performance deficiencies for females who completed the Advance Organizer were reduced. Male scores also improved for the AO participants, albeit not as dramatically as the scores of the females.

- **Third Null Hypothesis**

*Providing men and women with models of effective performance will not result in male/female attitudinal changes.*

This hypothesis could not be fully explored during Year Two. The stress indicators suggested that the Role Model intervention was found to have a positive effect on female efficacy and negative mood. However, the effect of role modeling on the attitude of male recruits toward female recruits could not be assessed because a suitable behavioral criterion representing individual and/or team effectiveness in the hands-on element of firefighting training was not available. These results imply that the RM treatment holds promise of being an effective procedure given an appropriate criterion. The corresponding team performance criteria and measurement necessary to test this hypothesis were not developed at the RTC because of procedural and resource constraints.

The initial findings must be interpreted cautiously, given the small sample size and the somewhat exploratory character of the data analysis. The findings clearly indicate that the AO treatment merits further analysis and refinement. Replication of the study and an in-depth analysis of the Advance Organizer will provide insight into strategies used by the recruits to synthesize technical material.

Demographic, academic, and educational variables will be assessed for their role on how academic data is assimilated and how it impacts the curricular successes of the male and female recruits. Specifically, the variables we will be assessing are: gender, formal education, ethnicity, age, general intelligence as measured by scores on AFQT, and attendance at remedial instruction received in the FAST lab. We will compare each of these variables with the academic post-test scores, the computer-based test scores, and AO interaction. AO interaction is defined as selection of method (concept map or linear) and selection of questions within the AO treatment. This information will provide us with insight into which strategies are the most successful at preparing students of different genders, ethnicity, education, intelligence, and age for the academic portion of the course.

The intense scrutiny of recruit training by Congress and the media with regard to gender integration has forced the Navy to re-evaluate its training pedagogy. The data yielded by this study will prove invaluable. Training policy decisions and instructional system design strategies will have a sound base built on concrete data. Additionally, as the demographics of the recruit population continue to evolve to include a greater percentage of females, minorities, and older recruits, the Navy will have data with which to develop effective remedial programs that embed sophisticated instructional technology such as intelligent tutors. Finally, the results of this study can be generalized and will be of functional use to our national educational communities.



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**APPENDIX A**  
**SPECIFIC COMMENTS FROM**  
**DATA COLLECTION EFFORT**

# **APPENDIX A** **SPECIFIC COMMENTS FROM DATA COLLECTION EFFORT**

No.	Date	Comp	Program	Program Location/Subj	Commentator	Comment
1	6/15/98	Gen	AO	Animation		Eductor animation does not play.
2	6/15/98	Gen	AO	Animation	Miller	Only 2 recruits from this lab mentioned that animation was missing. Suggests that no one else hit that page. If they were in the linear, they went to the test early. If in the map, they either intentionally went to the test early or didn't realize they had not hit that map.
3	6/15/98	14	AO	CM	Miller	No background image. (Reloaded program after class and could not reproduce problem.)
4	6/19/98	45	AO	CM	Goodman	Recruit missed sections because he could not tell which maps he had hit and which he had not.
5	6/19/98	46	AO	CM	Recruit	"Are we supposed to take test now or end of sections or when?" Recruit confused because of screen (?).
6	6/15/98	Gen		Condition	Miller	Recruits from this lab are in very poor condition – very tired; falling asleep; eyes are bloodshot.
7	6/16/98	Gen	RM	Condition	Goodman	Some nodding off during testimonials and video info. Awake for interactive questions.
8	6/16/98	Gen		Condition	Miller/ Goodman	Lab temperature <u>much</u> warmer. May have affect on more frequent nodding.
9	6/19/98	Gen		Condition	Goodman	Much cooler. AC working much better.
10	6/19/98	Gen	RM	Condition	Goodman	Recruits are fidgety and not "into" testimonials.
11	6/19/98	Gen	AO/RM	Condition	Goodman	2 or 3 recruits at any given time nodding off within 15 minutes of starting.
12	6/15/98	27	RM	Condition	Goodman	Recruit nodding off regularly during video clips – awake only to push forward and answer questions.
13	6/15/98	33	RM	Condition	Goodman	Heavy nodding/sleeping throughout.
14	6/15/98	41	RM	Condition	Goodman	Recruit nodding off regularly during video clips – awake only to push forward and answer questions.
15	6/15/98	Gen		Condition	Goodman	Glazed eyes during info videos; When interacting with video and questions, looked more lively.

No.	Date	Comp	Program	Program Location/Subj	Commentator	Comment
16	6/16/98	Gen		Condition	Miller	Recruits were more alert. RDC (2 <sup>nd</sup> sitting-females) stayed in the lab but this did not appear to intimidate the students. Students were relaxed and comfortable but did not sleep to the degree noted in the first night. RDC (1 <sup>st</sup> sitting – males) had been “pumping up” firefighting to his recruits – telling of his personal experiences with shipboard fires, the importance of firefighting, etc.
17	6/19/98	03	AO	Extinguishing Systems	Goodman	Did not erase pics behind question box. Box and examples.
18	6/15/98	04	AO	Feedback	Recruit	“Got a lot of studying to do.” (Recruit wrote down topics suggested for review from Test Summary page.)
19	6/16/98	06	AO	Feedback	Recruit	“What is the difference between ‘displacing oxygen’ and ‘removing’ oxygen.” (Made Miller aware that program is not consistent with verbiage. Program should be consistent with 4 ways of putting out a fire.
20	6/16/98	10	AO	Feedback	Recruit to Miller	Miller noticed that recruit did not finish test. When asked about it, recruit said program “just quit” after Q4. Said he did not hit the Quit button. Recruit added “I got nothing out of this. Sound was no good. Get rid of the voice.” Recruit said he would get more out of the program with the data directly on the screen.
21	6/15/98	11	AO	Feedback	Recruit	Need a warning (highlight button) of when to go to next page by forward button. She suggested audio cue.
22	6/15/98	12	AO	Feedback	Recruit	“Good program.”
23	6/15/98	15	AO	Feedback	Recruit	“How can I hear the question again?” (Suggested adding a ‘replay’ button for test questions (?))
24	6/16/98	20	AO	Feedback	Recruit	“That’s a lot of information.”
25	6/16/98	41	RM	Feedback	Recruit	“Very good program. Let me see gear that we’ll be using and the activities in FF. Should have people watch <u>before</u> Service Week so they understand chain of command – like in galley. Really good – <u>all</u> need to go through!”
26	6/16/98	Gen	RM/AO	Feedback	Goodman	Received several enthusiastic thanks from recruits on the way out of the lab.

No.	Date	Comp	Program	Program Location/Subj	Commentator	Comment
27	6/16/98	Gen		Feedback	Chief Campbell to Goodman/Miller	Chief Campbell had noticed that the students that day in the "Basic Fire Fighting" class had asked "more specific related" questions. "Basic Fire Fighting" is the first class in the firefighting training. The Chief was impressed assuming that the students had "read ahead" not realizing that his class had been the first of the recruits to be a part of our study.
28	6/15/98	Gen	RM	Feedback	Recruits (several)	Noticed instructors they'd had and seen "at this base".
29	6/15/98	Gen	NA	Forward	Miller	Forward – doesn't understand where to go.
30	6/19/98	13	AO	Frozen	Goodman	Quit was frozen on last screen. Had to ctrl-alt-del to end task to get out – Data ok?
31	6/19/98	19	AO	Frozen	Goodman	Quit was frozen on last screen. Had to ctrl-alt-del to end task to get out – Data ok?
32	6/15/98	16	AO	Intro	Miller	User function code error. When recruit makes initial choice, pop-up box appears and gives error message instead of "Are you sure..." Reloaded computer twice.
33	6/19/98	Gen	AO	Intro	Goodman/Miller	Fielded questions about which route to take (i.e., linear or map?) throughout the week.
34	6/19/98	24	RM	Laughing	Goodman	Recruit smiling and snickering during testimonials.
35	6/15/98	27	RM	Laughing	Goodman	Laughed when got comments and viewing both sailors' testimonials.
36	6/16/98	Gen	RM	Laughing	Goodman	Several recruits laughing and smiling at videos.
37	6/19/98	Gen	RM	Laughing	Goodman	Snickering and smiling through interactive questions and recruit videos.
38	6/16/98	02	AO	Linear	Miller	Bravo fire – Remember question – Text out of align.
39	6/15/98	Gen	AO	Linear	Miller	Section titles do not show up.
40	6/19/98	23	RM	Main Menu	Recruit	"Do I just go to any of them?"
41	6/15/98	05	AO	Misc	Recruit	"If there are watertight compartments, why did the Titanic sink?"
42	6/19/98	34		Misc	Goodman	Staman, 506-13-9016. Disk out for sign on – punched in before "ok" button.
43	6/16/98	36	RM	Misc	Miller	Recruit says she went through the whole program but screen does not reflect gray.
44	6/15/98	Gen	AO	Misc	Miller	Appeared to have a good split of students choosing linear or map.

No.	Date	Comp	Program	Program Location/Subj	Commentator	Comment
45	6/15/98	Gen	RM	Misc	Miller	Recruits tend to choose "Poor shipmate" on all questions.
46	6/15/98	Gen	NA	Misc	Goodman	Did not observe anyone pause/play (buttons) video. Maybe relabel as "REPLAY".
47	6/15/98	05	AO	Notes	Recruit	"Can I write this stuff down?"
48	6/16/98	05	AO	Notes	Miller	Recruit took his time. Took notes. Compare test score.
49	6/19/98	07	AO	Notes	Goodman	Used Training Guide – filling in blanks. Took notes. In close proximity to 20 and 21.
50	6/19/98	11	AO	Notes	Goodman	Notetaker. Refers to notes on Q17 and system Qs.
51	6/19/98	12	AO	Notes	Goodman	Notetaker. Refers to notes on Q17 and system Qs.
52	6/16/98	12	AO	Notes	Miller	Recruit took his time. Took notes. Compare test score.
53	6/19/98	13	AO	Notes	Goodman	Notetaker. Refers to notes on Q17 and system Qs.
54	6/16/98	16	AO	Notes	Miller	Recruit took his time. Took notes. Compare test score.
55	6/16/98	16	AO	Notes	Miller	Had to request recruit to begin the test. Notetaker.
56	6/16/98	17	AO	Notes	Miller	Recruit took his time. Took notes. Compare test score.
57	6/19/98	19	AO	Notes	Goodman	Notetaker. Refers to notes on Q17 and system Qs.
58	6/19/98	20	AO	Notes	Goodman	Used Training Guide – filling in blanks. Took notes. In close proximity to 7 and 21.
59	6/19/98	20	AO	Notes	Goodman	Used notes and Training Guide while taking test.
60	6/19/98	20	AO	Notes	Goodman	Notetaker. Refers to notes on Q17 and system Qs.
61	6/19/98	21	AO	Notes	Goodman	Used Training Guide – filling in blanks. Took notes. In close proximity to 7 and 20.
62	6/19/98	21	AO	Notes	Goodman	Notetaker. Refers to notes on Q17 and system Qs.
63	6/19/98	44	AO	Notes	Goodman	Notetaker. Refers to notes on Q17 and system Qs.
64	6/15/98	Gen	AO	Notes	Recruit	"Can I take notes?" (Recruit went to the question button several times. Remember style.)
65	6/15/98	Gen	AO	Notes	Miller	Fielded several "Can I take notes? / Should I take notes?" type of questions.
66	6/19/98	Gen	AO	Notes	Goodman	Fielded questions such as "Is this info on the final test?", "Should I be taking notes?" and "Will I see this again?"

No.	Date	Comp	Program	Program Location/Subj	Commentator	Comment
67	6/16/98	01	AO	Overs	Miller/ Goodman	6/16/98 – Recruit started over because he wanted to go through the program again. Collected only the data information from his first try.
68	6/16/98	03	AO	Overs	Miller/ Goodman	6/16/98 – Recruit started over because he wanted to go through the program again. Collected only the data information from his first try.
69	6/16/98	04	AO	Overs	Miller/ Goodman	6/16/98 – Recruit started over because he wanted to go through the program again. Collected only the data information from his first try.
70	6/19/98	04	AO	Overs	Goodman	Restarted ½ way through lessons. He had double-clicked sign-on twice. So 2 AOs running. 2 <sup>nd</sup> AO came to front somehow. Quit out of 1 <sup>st</sup> and continue in the 2 <sup>nd</sup> . Recruits start more than one sign-on often.
71	6/16/98	05	AO	Overs	Recruit	Recruit started program over on his own. When asked why, he replied “I hit the wrong key.”
72	6/16/98	16	AO	Overs	Miller	Recruit quit the program and restarted on his own. (Take second session on data disk.)
73	6/16/98	20	AO	Overs	Miller/ Goodman	6/16/98 – Recruit started over because he wanted to go through the program again. Collected only the data information from his first try.
74	6/15/98	05	AO	Question	Miller	Notice recruit used the question button several times.
75	6/16/98	06	AO	Question	Miller	Section 9 – Question erase button.
76	6/19/98	06	AO	Question	Recruit	What is the Question Mark button for? Oh, ok. now how do I get back?
77	6/15/98	Gen	RM	Quit	Goodman	Kill last screen. Quit off menu straight out of program.
78	6/16/98	Gen		RDC	Goodman	RDC pumped up guys to pay attention to this info because it saves lives – “most important info in boot camp.”
79	6/16/98	Gen		RDC	Goodman	RDC stayed in room. Motivated (nicely) people to stay awake.
80	6/15/98	Gen	RM	Safety Hazards	Recruits	Wanted to click in more than 1 place for problems (storage shelves)
81	6/16/98	Gen	AO/RM	Sign-on	Recruits	How do I pick male/female? Need to change from mouse click to key stroke.
82	6/19/98	Gen	AO/RM	Sign-on	Goodman	Several asked how to go back to entry before getting to the Correct button.

No.	Date	Comp	Program	Program Location/Subj	Commentator	Comment
83	6/15/98	Gen		Sound	Miller	Sound really low. Chief Ennis indicated that only a few machines had good quality sound cards. We purchased higher quality headsets but this only slightly improved sound.
84	6/15/98	23	RM	Teamwork	Recruit	Did Teamwork topic twice because did not get all of it.
85	6/19/98	24	RM	Teamwork	Goodman	Teamwork exercises have no titles.
86	6/19/98	43	RM	Teamwork	Goodman	Doesn't have any audio – only on this one. Teamwork – team being lethargic.
87	6/15/98	Gen	RM	Teamwork	Goodman	No audio on Teamwork video with team being lethargic. Recruit (user) thinks something is wrong.
88	6/16/98	05	AO	Test	Miller	Test score: 70%. Same topics highlighted as 16. Since computers 5 and 16 are not close to each other, check data to compare which actual questions missed. May be the way question is worded.
89	6/19/98	08	AO	Test	Recruit	"I got to the test by accident." (Was on the last screen so saw all of the questions.) He chose map then hit the wrong button by accident.
90	6/16/98	16	AO	Test	Miller	Test score: 70%. Same topics highlighted as 5. Since computers 5 and 16 are not close to each other, check data to compare which actual questions missed. May be the way question is worded.
91	6/15/98	18	AO	Test	Miller	Pop-up box – Can't find 9q2 video. (All of Section 9 videos are missing from directory on computer. Reloaded computer after class.)
92	6/15/98	Gen	AO	Test	Recruit	Well – I failed that test! Can I do this program again? How can I remember this?
93	6/15/98	Gen	AO	Test	Miller	Test title font wrong.
94	6/15/98	Gen	AO	Test	Miller	No topic buttons (?)
95	6/16/98	Gen	AO	Test	Miller	Several recruits asked if they were to take the test after each section.
96	6/16/98	Gen	AO	Test	Miller	Question about small Alpha fire, notice many recruits wanting to click both Water and CO2.
97	6/19/98	Gen	AO	Test	Goodman	Noticed several unsure and asked me about how many answers can give on test – for example 1, 11, 12, etc.
98	6/15/98	03	AO	Test – Q12	Goodman	Font in answers (Q12 & Q13) too big (?). User could drag and drop so answers did not line up.
99	6/15/98	Gen	AO	Test – Q12	Miller	Make Q12 pictures non-moveable.



No.	Date	Comp	Program	Program Location/Subj	Commentator	Comment
100	6/15/98	03	AO	Test – Q13	Recruit	Skipped Q13. Went from Q12 to Q14.
101	6/16/98	03	AO	Test – Q13	Miller	Program did not lock up at Q13. Recruit does not remember if he got it right/wrong or even if Q13 showed up. Check data disk.
102	6/16/98	07	AO	Test – Q13	Miller	Skipped Q13 and Q14. Went from Q12 to Q15. Q12 wrong. (2 <sup>nd</sup> sitting.)
103	6/16/98	11	AO	Test – Q13	Miller	Skipped Q13. Went from Q12 to Q14. Q12 wrong. (2 <sup>nd</sup> sitting.)
104	6/15/98	12	AO	Test – Q13	Miller	Skipped Q13. Went from Q12 to Q14.
105	6/16/98	12	AO	Test – Q13	Miller	Skipped Q13. Went from Q12 to Q14. Q12 wrong. (2 <sup>nd</sup> sitting.)
106	6/15/98	16	AO	Test – Q13	Miller	Q13 freezes if answer is wrong. Can't quit, escape. Have to completely restart. (Went through linear.)
107	6/16/98	16	AO	Test – Q13	Miller	Skipped Q13. Went from Q12 to Q14. Q12 wrong. (2 <sup>nd</sup> sitting.)
108	6/15/98	17	AO	Test – Q13	Miller	Q13 freezes if answer is wrong. Can't quit, escape. Have to completely restart. (Went through map.)
109	6/15/98	18	AO	Test – Q13	Miller	Q13 freezes if answer is wrong. Can't quit, escape. Have to completely restart.
110	6/15/98	Gen	AO	Test – Q13	Goodman	Lost data. Froze when Q13 wrong. Could not quit and disk was out so no info.
111	6/16/98	Gen	AO	Test – Q13	Miller	Did not notice that any computers skipped Q13 in 1 <sup>st</sup> sitting. Asked that recruits raise their hand at Q12 and we followed them through Q13 and gave the correct answer to avoid program from locking up.
112	6/16/98	06	AO	Test – Q17	Miller	Q17 replays (?) Stuck in a loop. Program will not go to Q18. Problem appears to be limited to this computer.
113	6/16/98	Gen	AO	Test – Q17	Miller	Need better instructions on Q17. Recruits do not appear to understand what is expected of them or they only drag 1 picture for each column rather than all the pictures into the correct column.
114	6/15/98	08	AO	Test – Q3	Miller	Can't find video for Q3. Other computers do not appear to be missing video. Assume this is a problem limited to this computer.
115	6/15/98	16	AO	Test – Q3	Miller	Q3 videos – recruit dragged videos rather than titles.

No.	Date	Comp	Program	Program Location/Subj	Commentator	Comment
116	6/19/98	Gen	AO	Test – Q3	Goodman	Q3 – if drop names behind videos, can't get to them again. Background moves. Memory low – can't play videos.
117	6/15/98	Gen	AO	Test – Q3	Goodman	Can drag videos around on Question 3 – Ship's Bells and General Alarm.
118	6/15/98	Gen	AO	Test – Q3	Miller	Question 3 – bells and general alarm. Confused about instructions. Recruit dragged the video.
119	6/16/98	Gen	AO	Test – Q5	Miller	Q5 – "How can I replay the question?" "What condition did the question say?"
120	6/15/98	29	RM	Testimonials	Goodman	Laughed when got comments and viewing both sailors' testimonials.
121	6/15/98	38	RM	Testimonials	Recruit	There isn't a "both" choice on the screen – so where click?
122	6/19/98	Gen	RM	Testimonials	Goodman	Testimonials need titles.
123	6/15/98	03	AO	Time	Miller	Began test at 30 minutes. (Indicates went straight through – no questions/topics, etc.)
124	6/15/98	03	AO	Time	recruit	"I thought I had to take the test to get out of section." Went to test at 5 minutes.
125	6/15/98	06	AO	Time	Miller	Began test at 30 minutes. (Indicates went straight through – no questions/topics, etc.)
126	6/19/98	07	AO	Time	Goodman	Recruit stayed until time up to continue going through information and taking notes.
127	6/15/98	20	AO	Time	Miller	Began test at 30 minutes. (Indicates went straight through – no questions/topics, etc.)
128	6/16/98	Gen	RM	Time	Goodman	3 recruits finished at 30 minutes. 3 more at 35 minutes. All but 2 finished @ 40 minutes. Last 2 had been sleeping/taking breaks throughout.
129	6/16/98	Gen	RM	Time	Goodman	All recruits done between 30 and 45 minutes.
130	6/19/98	05	AO	Video	Goodman	Video 8-4 missing. (Check that path shows ./src/video.)
131	6/16/98	16	AO	Video	Miller	Check Q2-5 video (?).
132	6/15/98	14	AO	Video 8-4	Miller	Video 8-4 missing. (Check that path shows ./src/video.)
133	6/16/98	Gen	AO	Video 8-4	Miller	Video 8-4 missing. (Check that path shows ./src/video.)
134	6/16/98	13	AO	Videos	Miller	Tutorial videos missing. Computer not program (reload after class).

CM – Concept Map  
NA – Not Applicable  
RDC – Recruit Division Commander

**APPENDIX B**  
**CHANGES MADE TO ADVANCE ORGANIZER**  
**AND ROLE MODEL INTERVENTIONS**

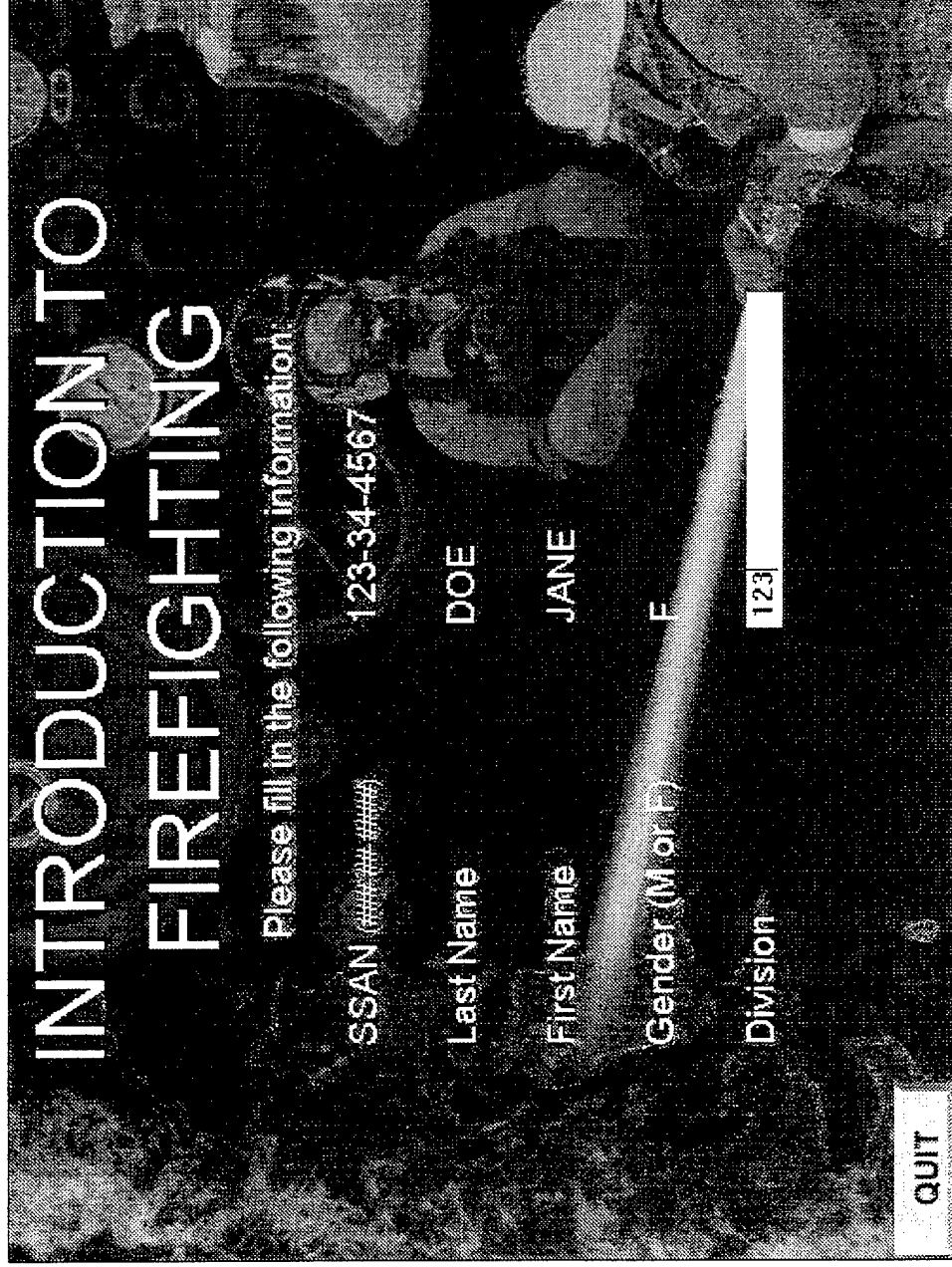
## APPENDIX B

### CHANGES MADE TO ADVANCE ORGANIZER AND ROLE MODEL INTERVENTIONS

Change
Video 3-1 doesn't play, corrected.
Eductor animation doesn't play, corrected.
Extinguishing systems – did not erase pics behind question box, corrected.
Correct inconsistent text problem (displace/remove fuel, etc.).
Correct Question 13 lock-up problem. Program skips it or locks up.
Check font on Q13, corrected.
Check font on Q12, corrected.
Make pics on Q12 non movable.
Bravo fire, remember question, text out of alignment, corrected.
Section Titles (AO linear) do not show up, corrected.
Teamwork seems to skip sections, corrected.
Video 9q2 missing – change relative path.
Test title font wrong, corrected.
Make pics on Q3 nonmovable.
Q3 – background moves, corrected.
Q3 – if name drops behind video, can't retrieve it to finish question, corrected.
Re-record parts of script (correct forward/next issue, etc.).
Redo Graphical User Interface to make it more readable.
Reconcile “poor shipmate” problem by making it “as applied to this situation”.
Did not observe any recruits pausing or replaying video. Relabel button as “Replay”.
Add method of leaving questions without asking a question.
Delete last screen so can't Quit off menu straight out of program (RM).
Change Male/Female from mouse click to key stroke.
Team lethargic – RM – redo audio.
Teamwork exercises have no titles, corrected.
Provide better instructions on Q17. Students want to drag only one for each subject.
Testimonials need titles, corrected.
Q3, video of bell, make video end at bell.
Add more text instructions throughout.
Show section complete on map.
Highlight “Everything” and “Specific” buttons as they are discussed.
Add cues for forward.

**APPENDIX C**  
**SCREEN DISPLAYS FROM ADVANCE ORGANIZER**  
**AND ROLE MODEL TREATMENTS**

# Advanced Organizer

The background of the form is a black and white photograph of two firefighters in full protective gear, including helmets and oxygen tanks, working in a smoky environment. One firefighter is in the foreground, and another is slightly behind and to the right.

## INTRODUCTION TO FIREFIGHTING

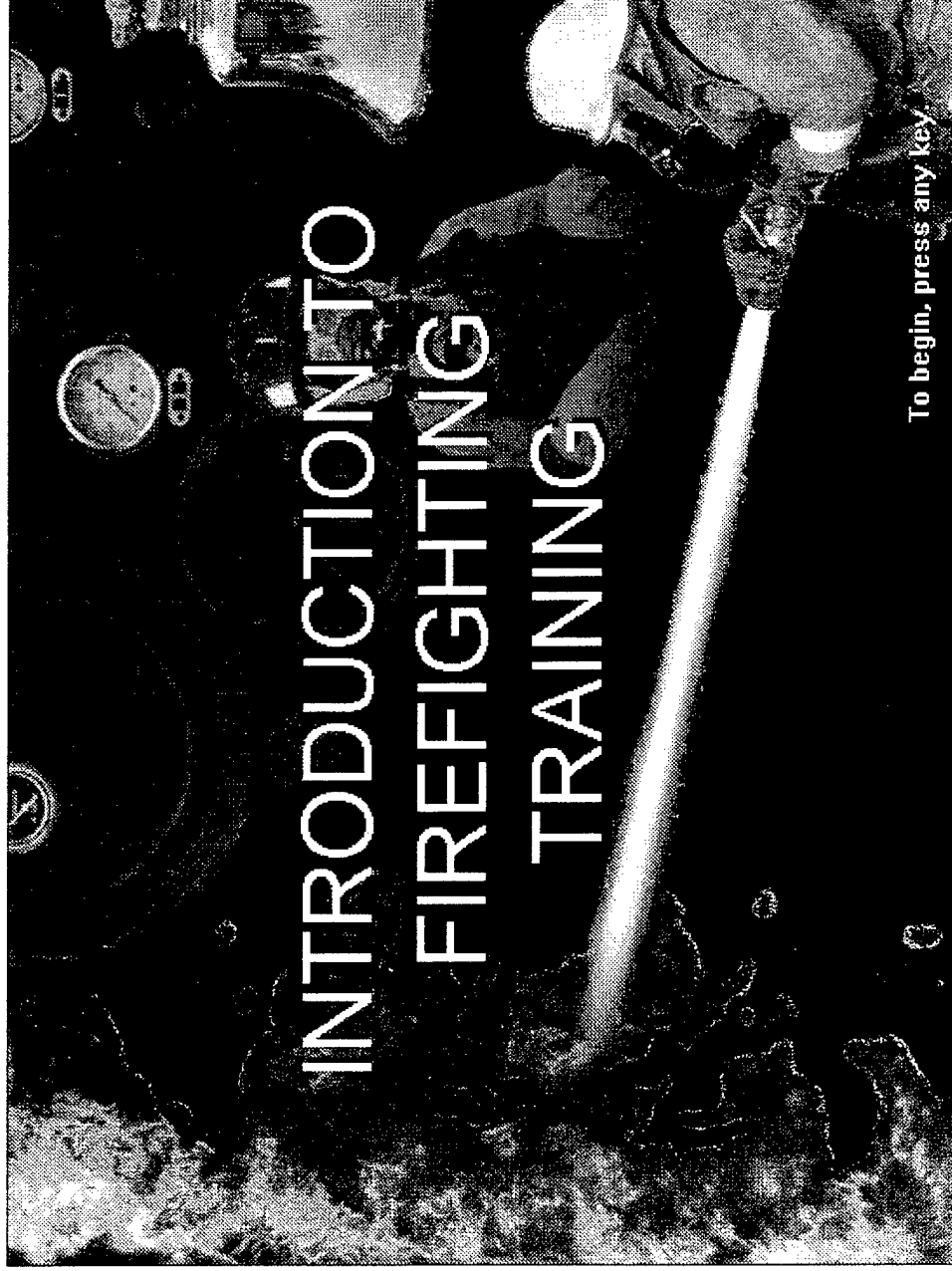
Please fill in the following information:

SSAN (####-####)	123-34-4567
Last Name	DOE
First Name	JANE
Gender (M or F)	F
Division	123

QUIT

## Student Tracking - Data Collection


# Advanced Organizer



# Advanced Organizer

**NAVIGATION HELP**

Click on any of the navigation buttons for help information.



Click **OK** when you're ready to leave "HELP".

**QUIT** **HELP** **TEST** **TOPICS** **BACK** **?** **FORWARD**



# Advanced Organizer

## 9. Classes of Fire and Fire Extinguishing Agents & Systems

### QUESTIONS?

1. I am not a DC man. Why is this information important to me?
2. Is the weight of the equipment a problem for females?
3. What happens if I use the wrong extinguishing agent or system?
4. After recruit training, will I receive further training on these systems?
5. What exactly do I need to remember?

## Capability to Ask Questions

# Advanced Organizer

**1. Nature of Fire**

Fire Tetrahedron:  
Fuel  
Oxygen  
Heat  
Uninhibited Chain Reaction

Heat

PAUSE II

REPLAY

FORWARD

?

**Video**

# Advanced Organizer

4. Compartment Identification

Compartment's address  
or ID.

2-20-1-L  
FR. 20-65  
1ST DIV.

QUIT HELP TEST TOPICS BACK ? FORWARD

Photographs and Graphics

# Advanced Organizer

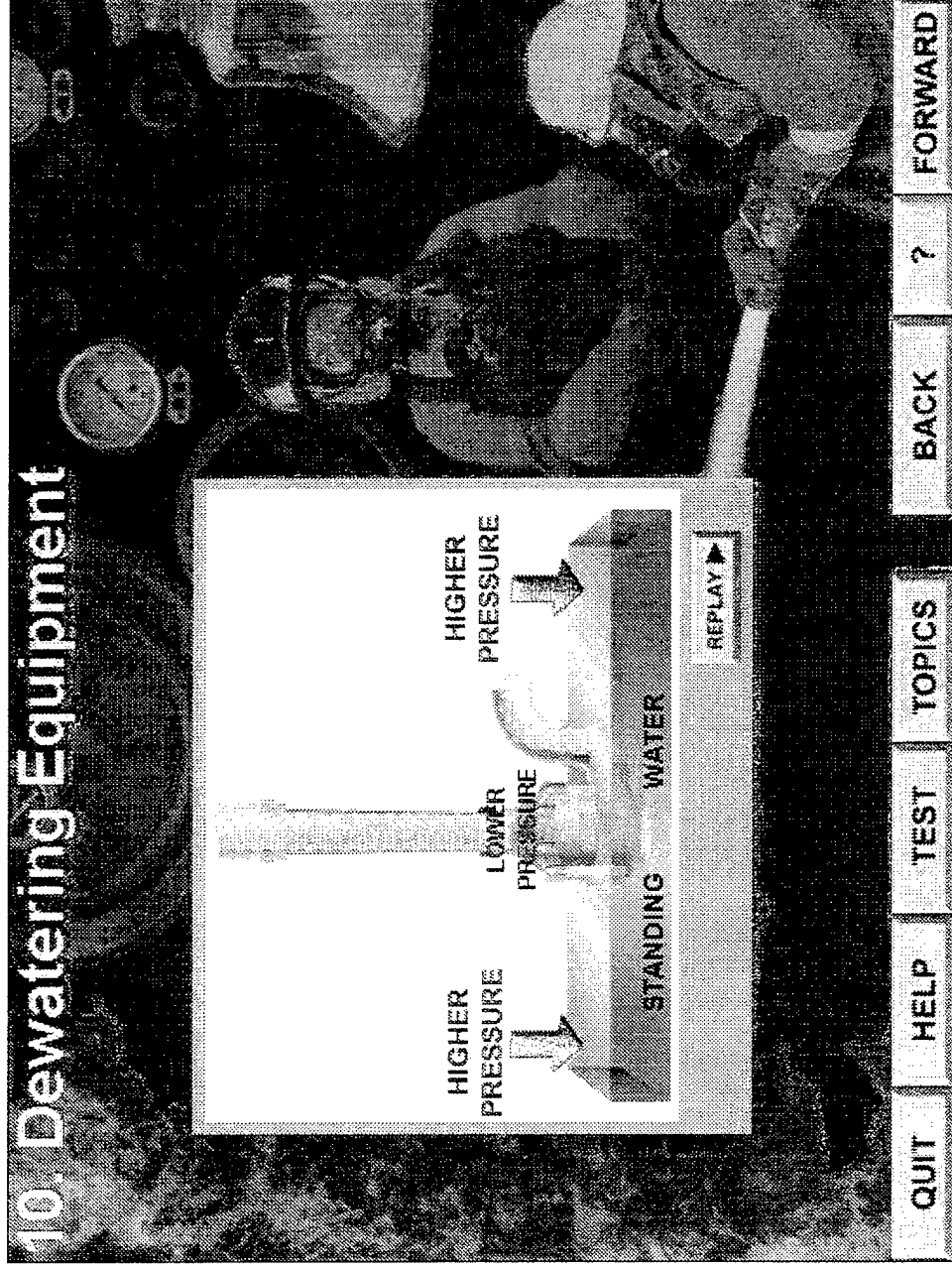
**7. Protective Clothing**

Helmet  
Antiflash Hood  
OBA  
Gloves  
Coveralls  
Boots

QUIT HELP TEST TOPICS BACK ? FORWARD

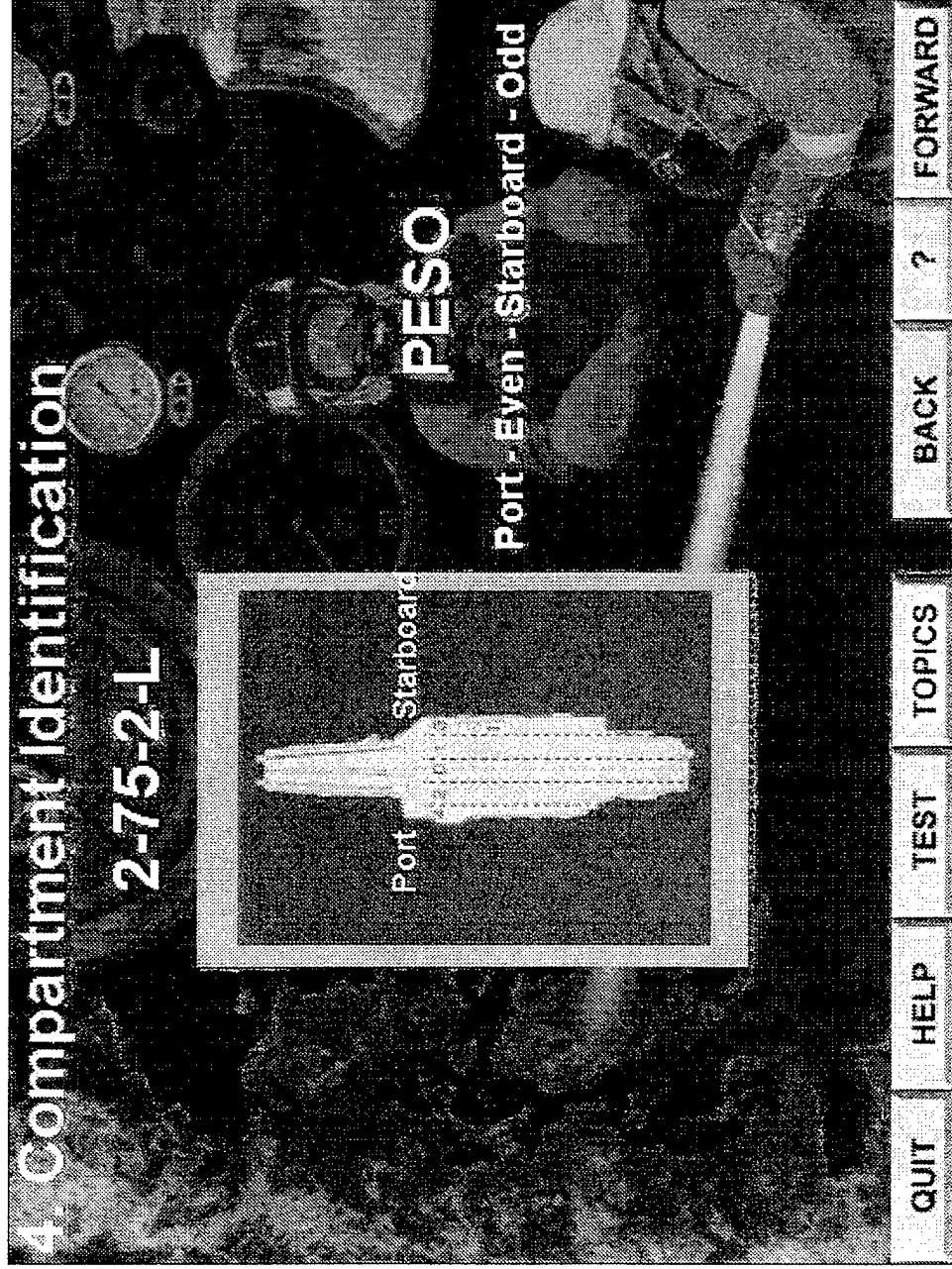
# Student Interaction

# Advanced Organizer



Animation

# Advanced Organizer



Audio with Support Text

# Advanced Organizer

## 5. Material Conditions of Readiness

### FIREFIGHTING TOPICS

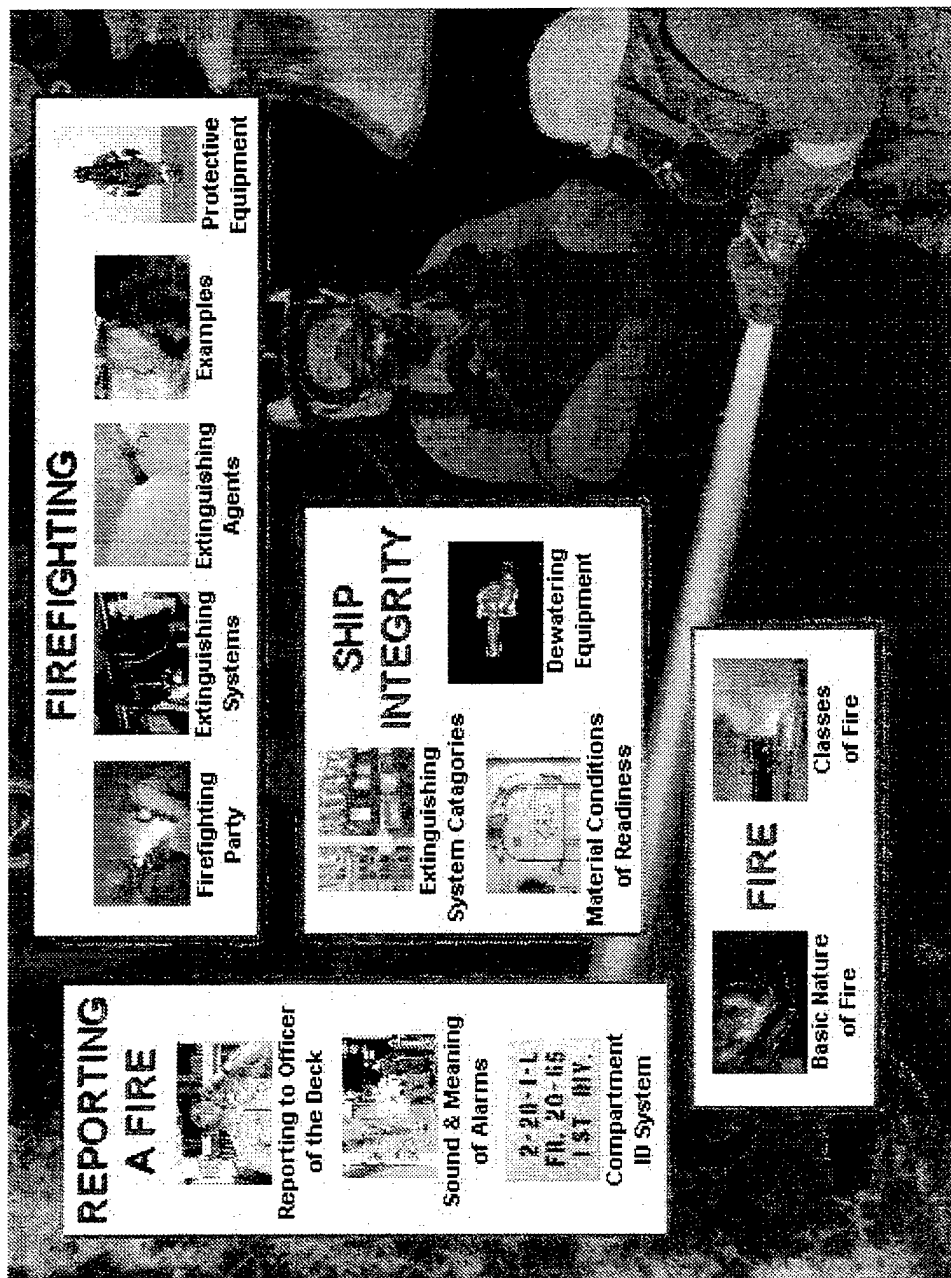
1. Nature of Fire
2. How to Report a Fire
3. Response to Fire Alarm
4. Compartment Identification
5. Material Conditions of Readiness
6. Breathing Devices
7. Protective Clothing
8. Performing in a Firefighting Party
9. Classes of Fire and Fire Extinguishing Agents & Systems
10. Dewatering Equipment

OK

**Topics Covered - Yet to Cover**



# Advanced Organizer



# Concept Map



# Advanced Organizer

**Test**

Question 1: What type of information must be given when reporting a fire?

**A** Type of emergency

**B** Location of emergency

**C** Your name

**D** Your rate or rank

**E** Your telephone number

**F** Your immediate supervisor's name and rank

**QUIT**

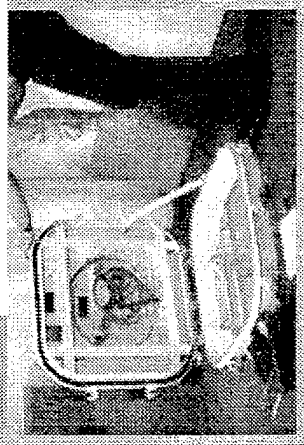
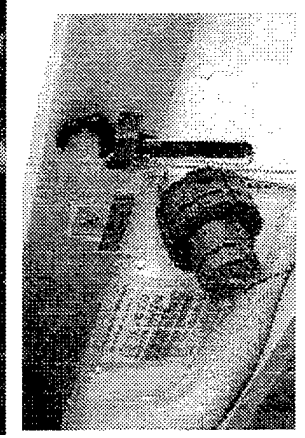
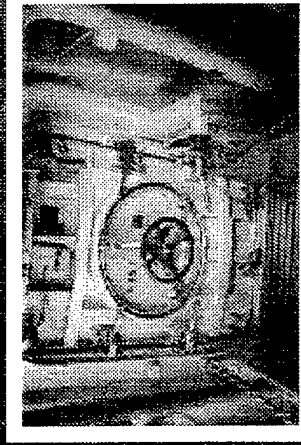
**FORWARD**

## Test - Multiple Answers

# Advanced Organizer

## Test

Question 5: After hearing the announcement, you immediately know that you must close all of your assigned fittings. Click on the fittings that you should close. To hear the audio again, click on the Replay button.



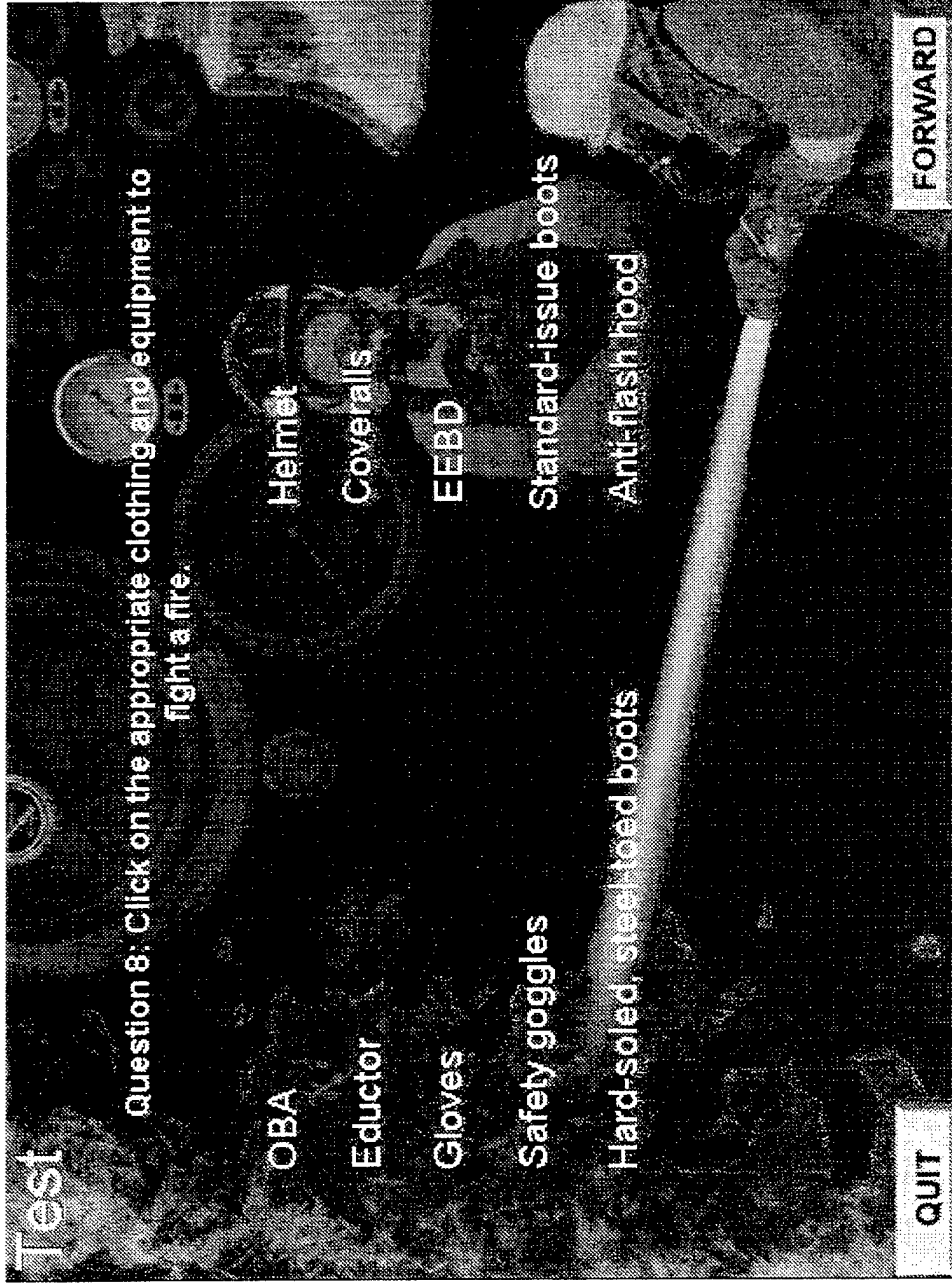
QUIT

REPLAY ▶

FORWARD

## Audio Prompt - Action Response

# Advanced Organizer




Test - List

# Advanced Organizer

**Test**

Question 2: While waiting for the firefighting team to arrive, you should:



**A** Attempt to extinguish the fire in all circumstances

**B** Attempt to extinguish only small fires

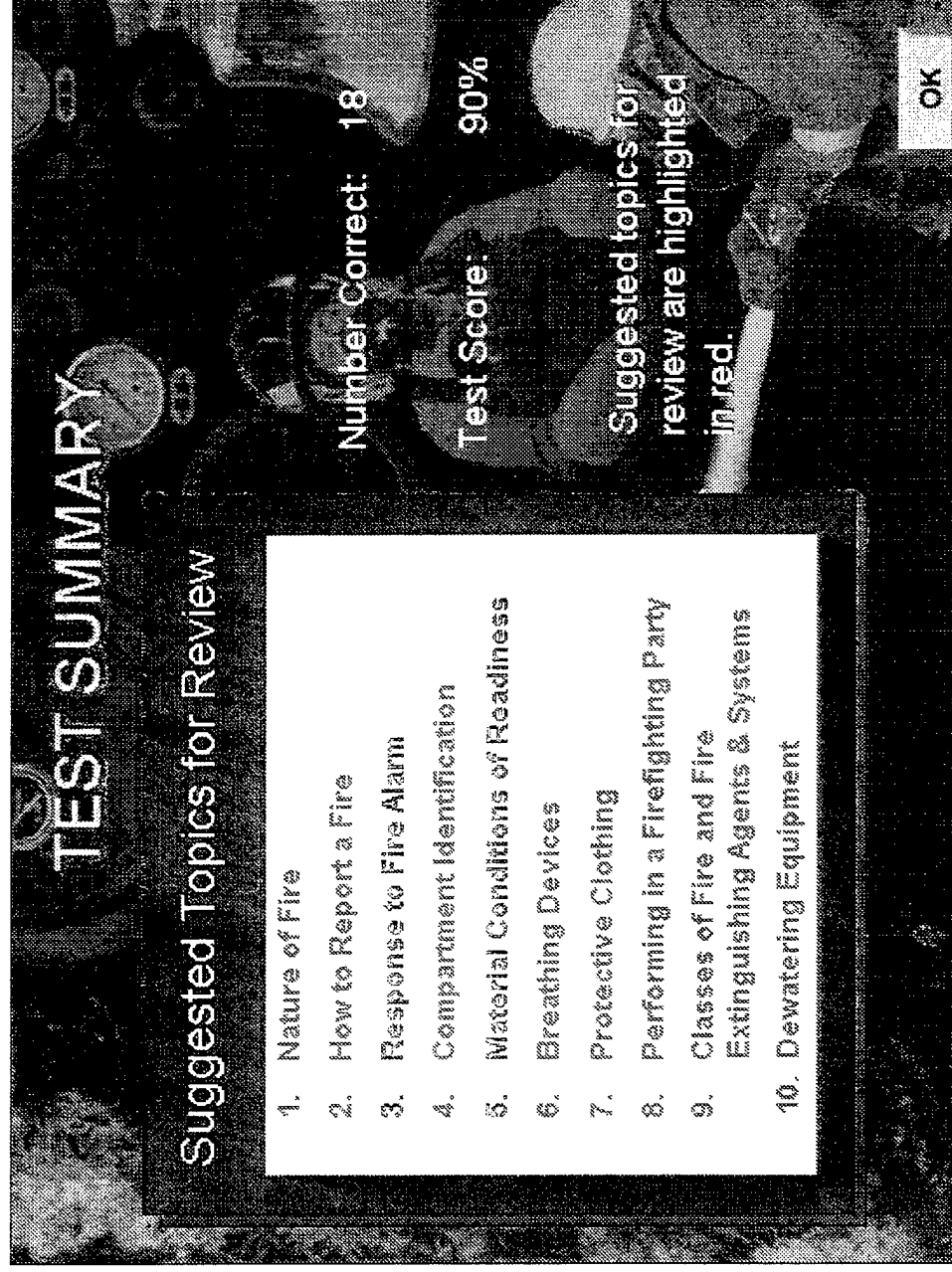
**C** Put on a OBA

**D** Sound general alarm

**QUIT** **FORWARD**

**Test - Correct/Incorrect Feedback**

# Advanced Organizer



## TEST SUMMARY

Suggested Topics for Review

1. Nature of Fire
2. How to Report a Fire
3. Response to Fire Alarm
4. Compartment Identification
5. Material Conditions of Readiness
6. Breathing Devices
7. Protective Clothing
8. Performing in a Firefighting Party
9. Classes of Fire and Fire Extinguishing Agents & Systems
10. Dewatering Equipment

Number Correct: 18

Test Score: 90%

Suggested topics for review are highlighted in red.

OK

## Test - Student Performance

# Role Modeler



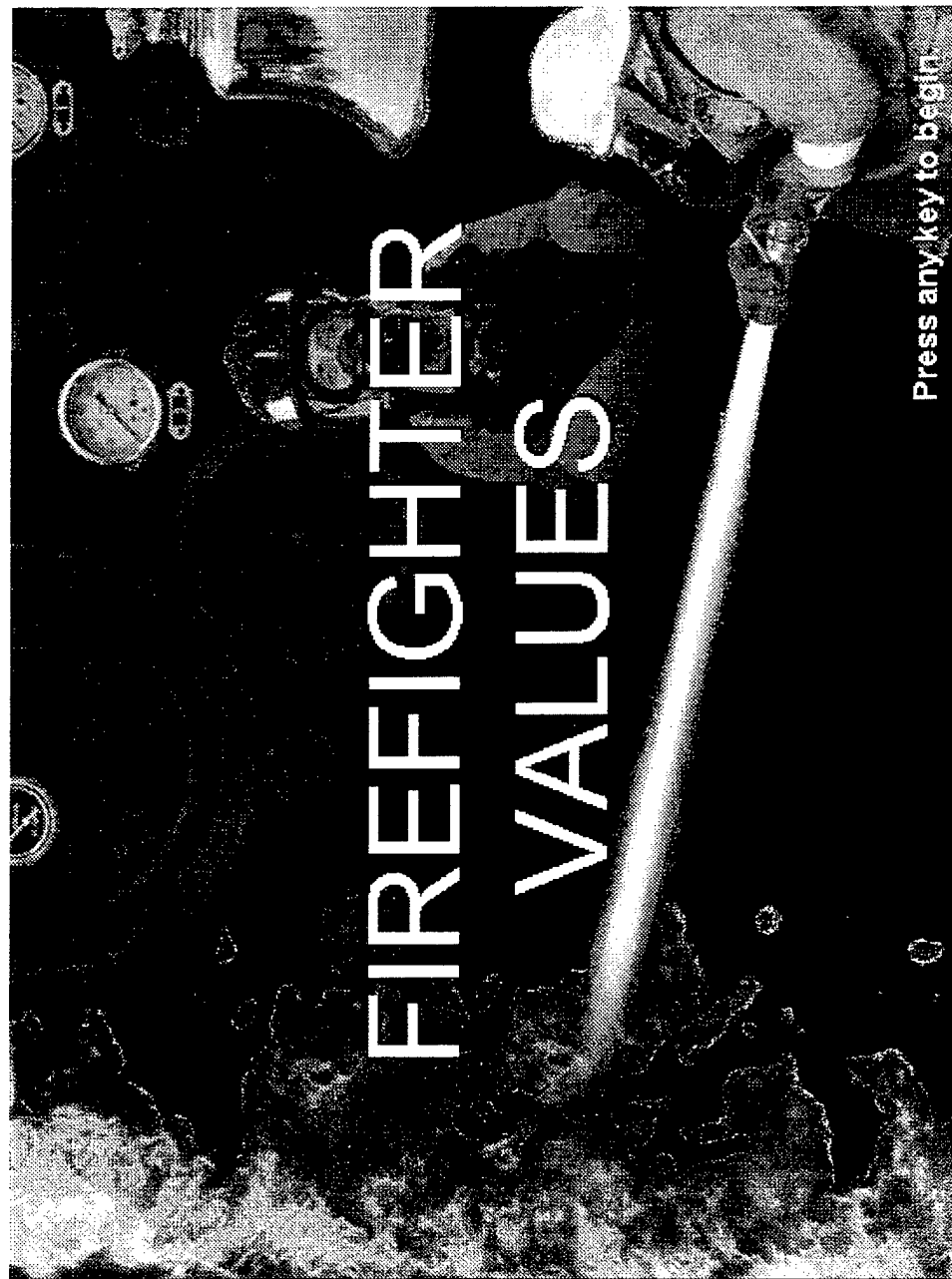
**FIREFIGHTING  
VALUES**

Please fill in the following information:

SSAN (###-##-####)	123-45-6789
Last Name	DOE
First Name	JOHN
Gender (M or F)	<input type="radio"/> M <input type="radio"/> F
Division	

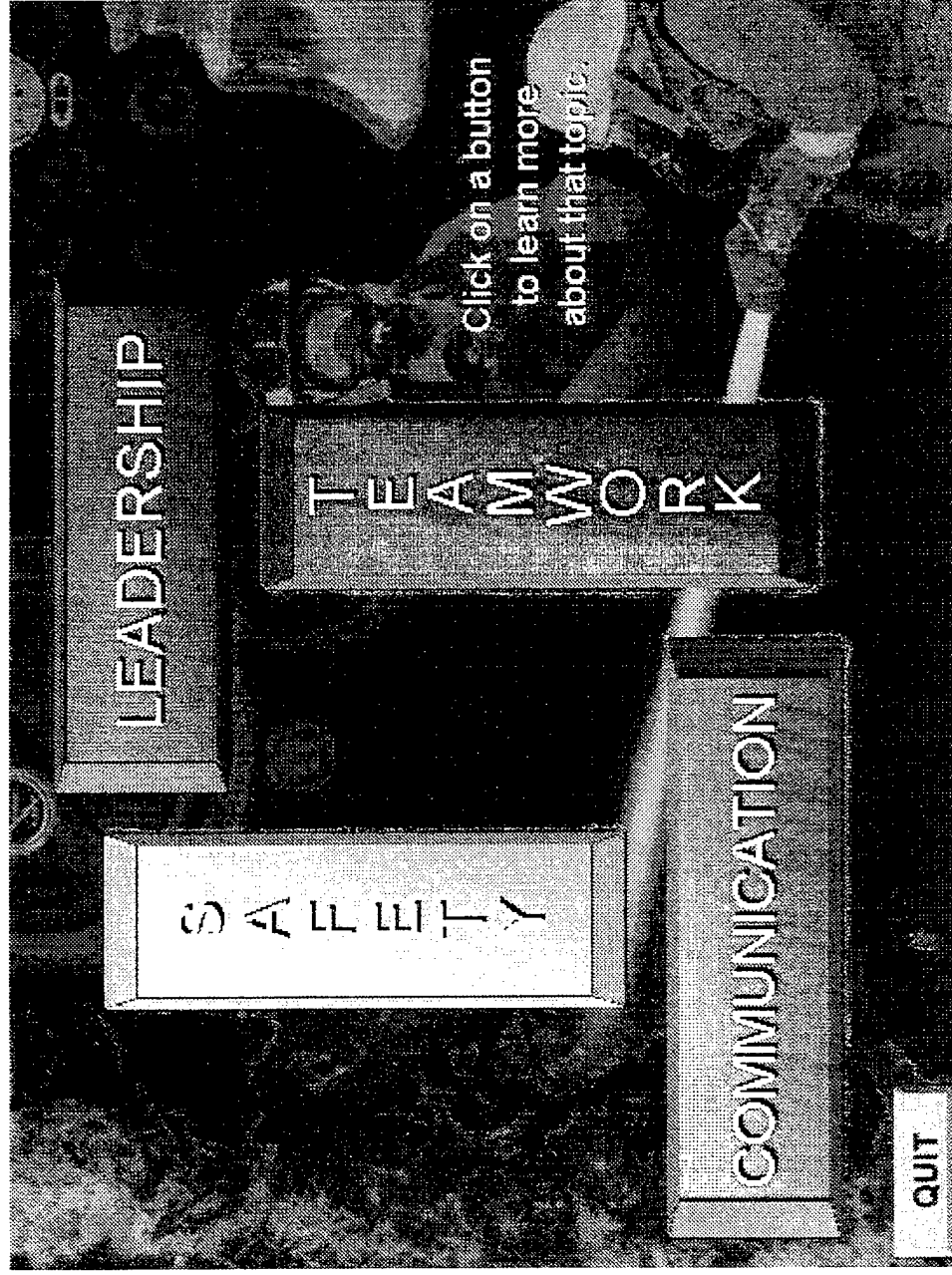
# Student Tracking - Data Collection

# Role Modeler





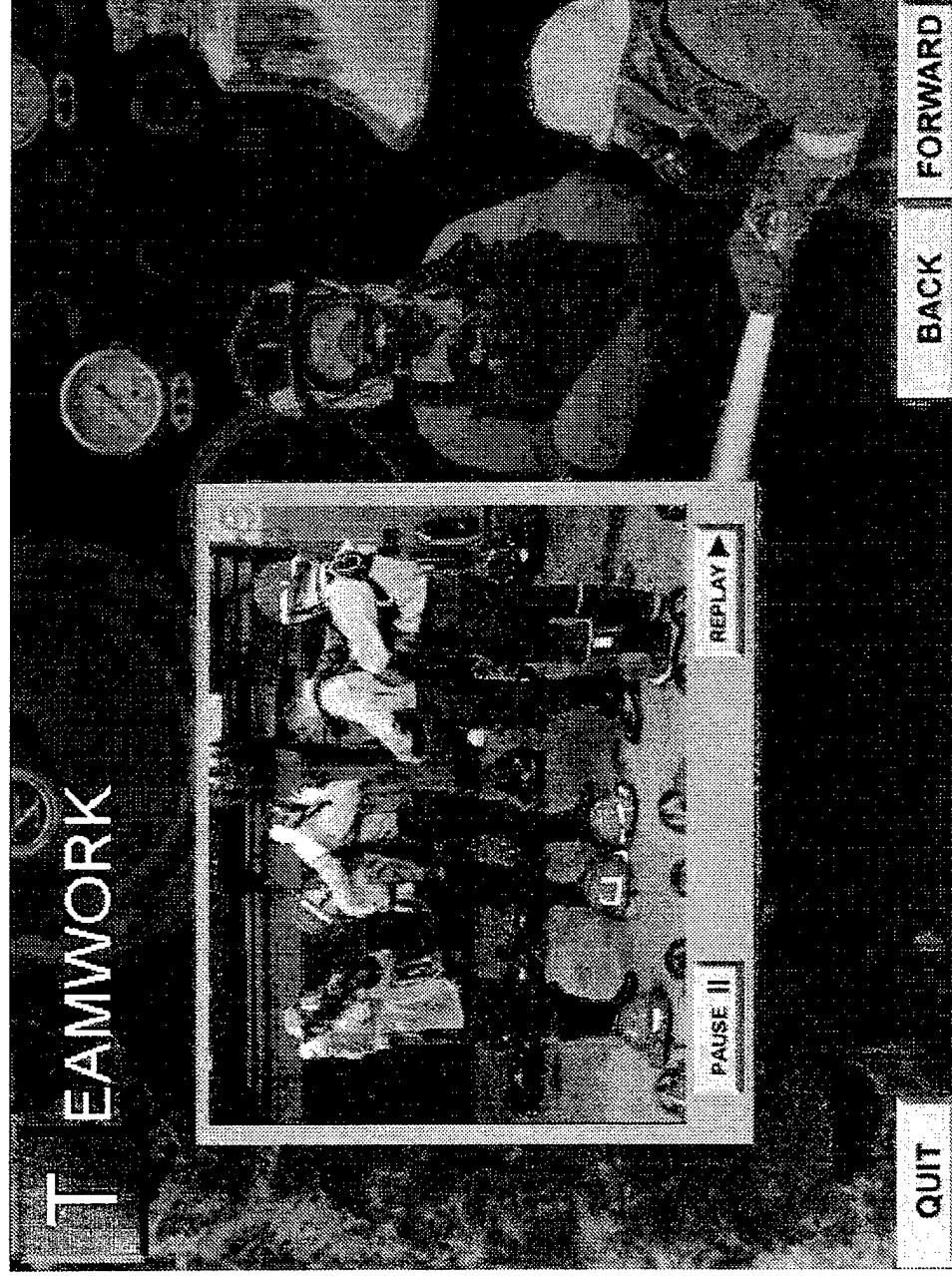
# Role Modeler



# Menu



# Role Modeler



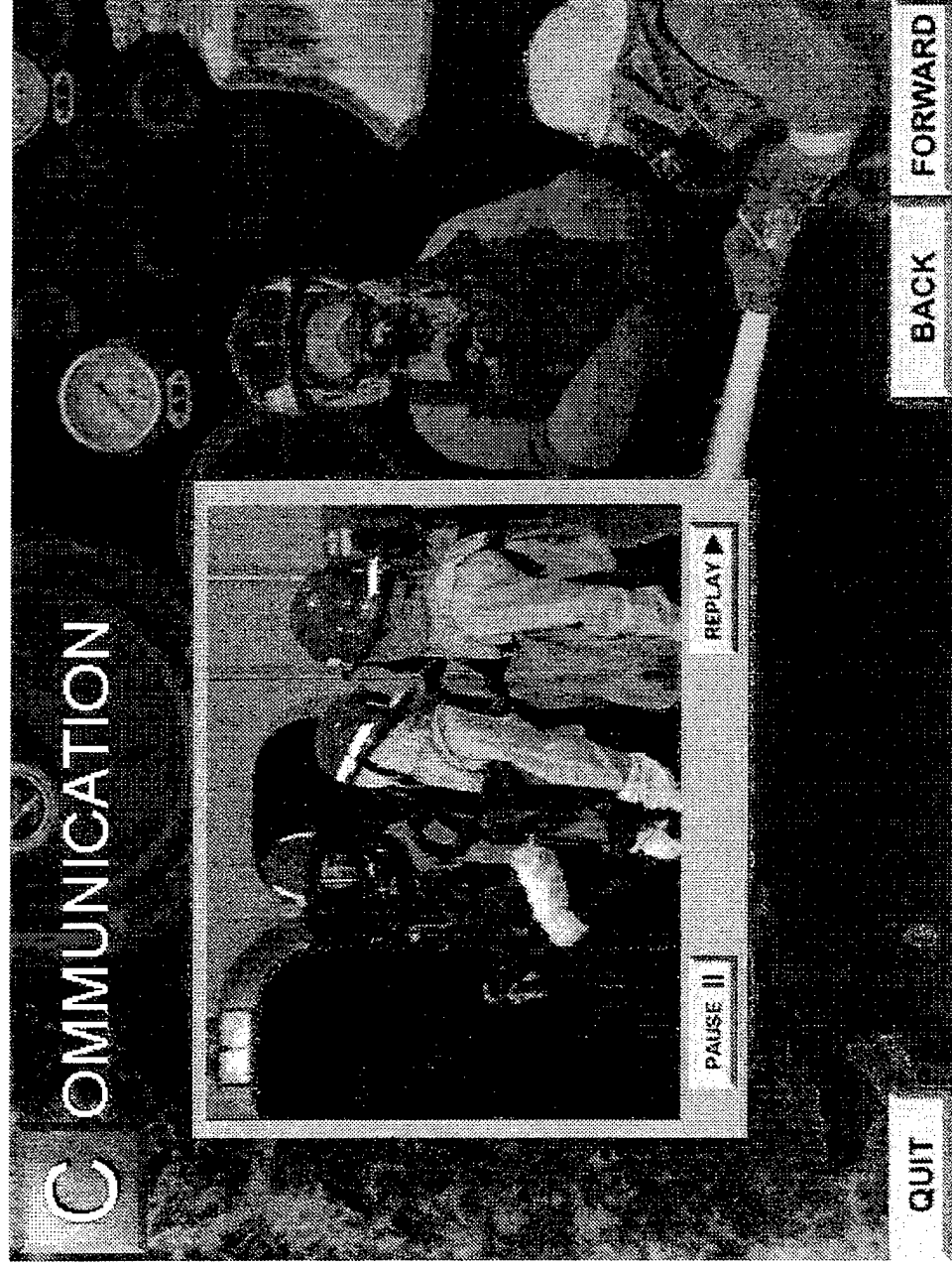
## Teamwork

# Role Modeler



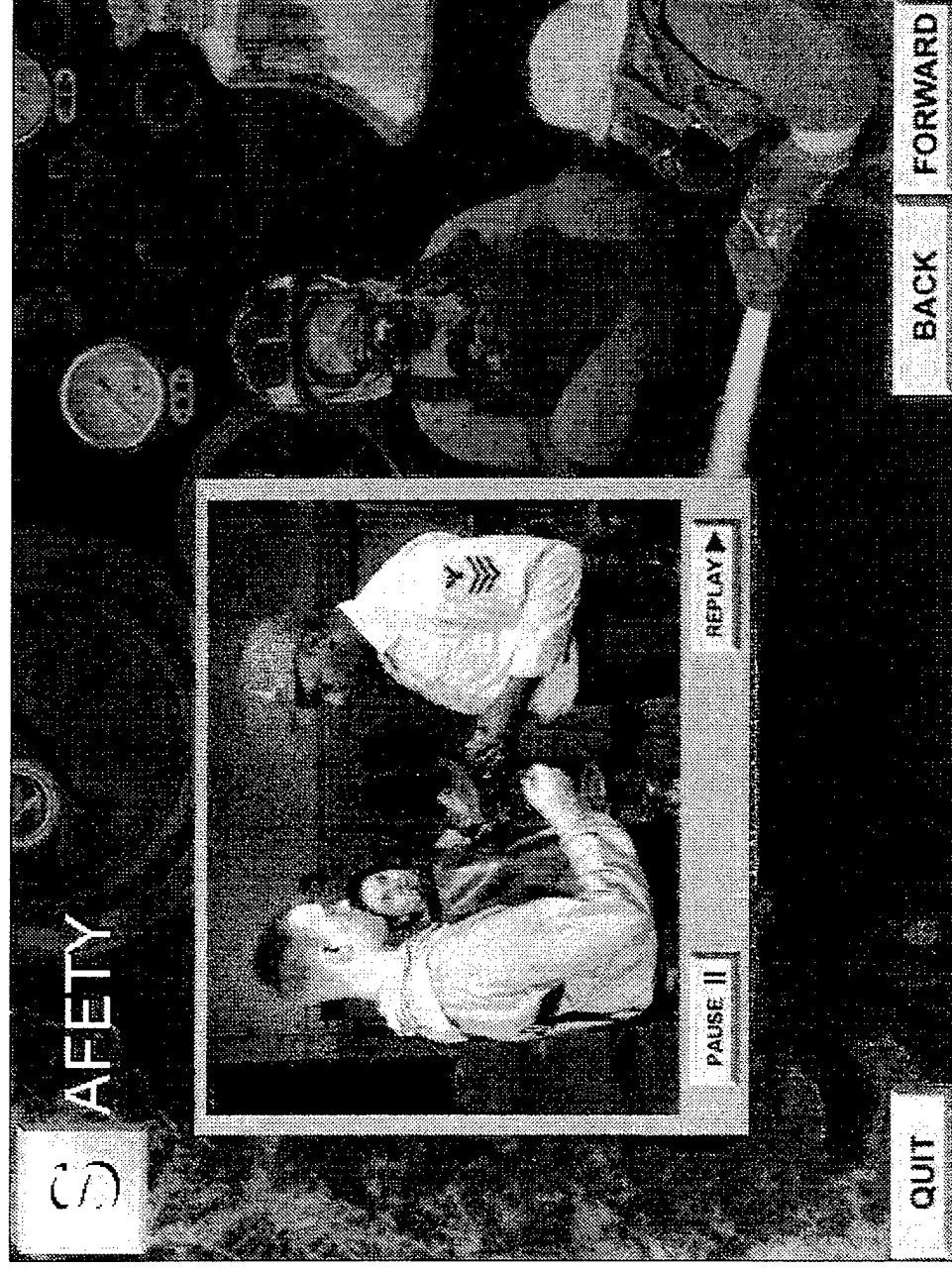
# Leadership Skills

# Role Modeler



## Communication Skills

# Role Modeler



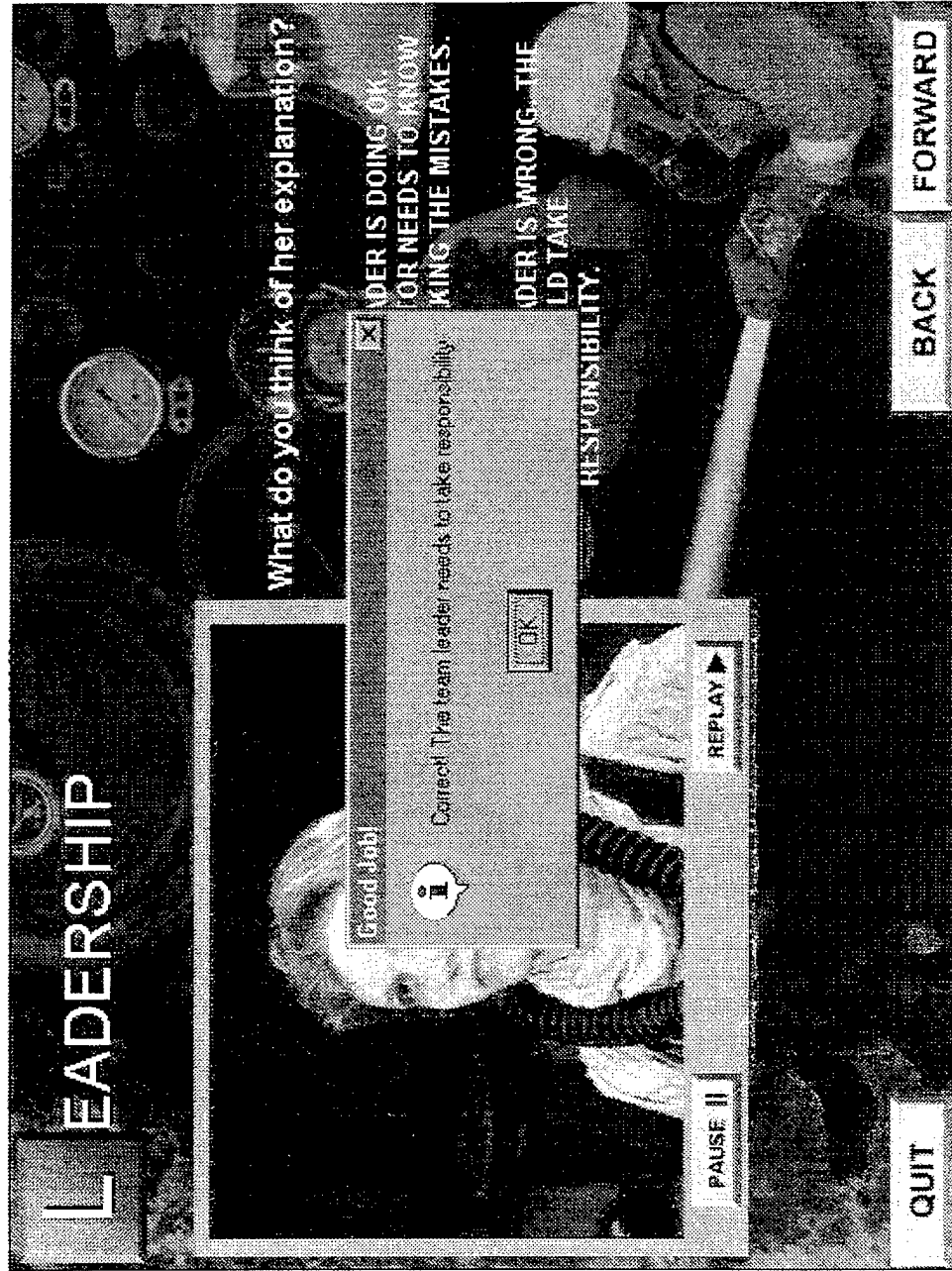
*Safety Awareness*

# Role Modeler



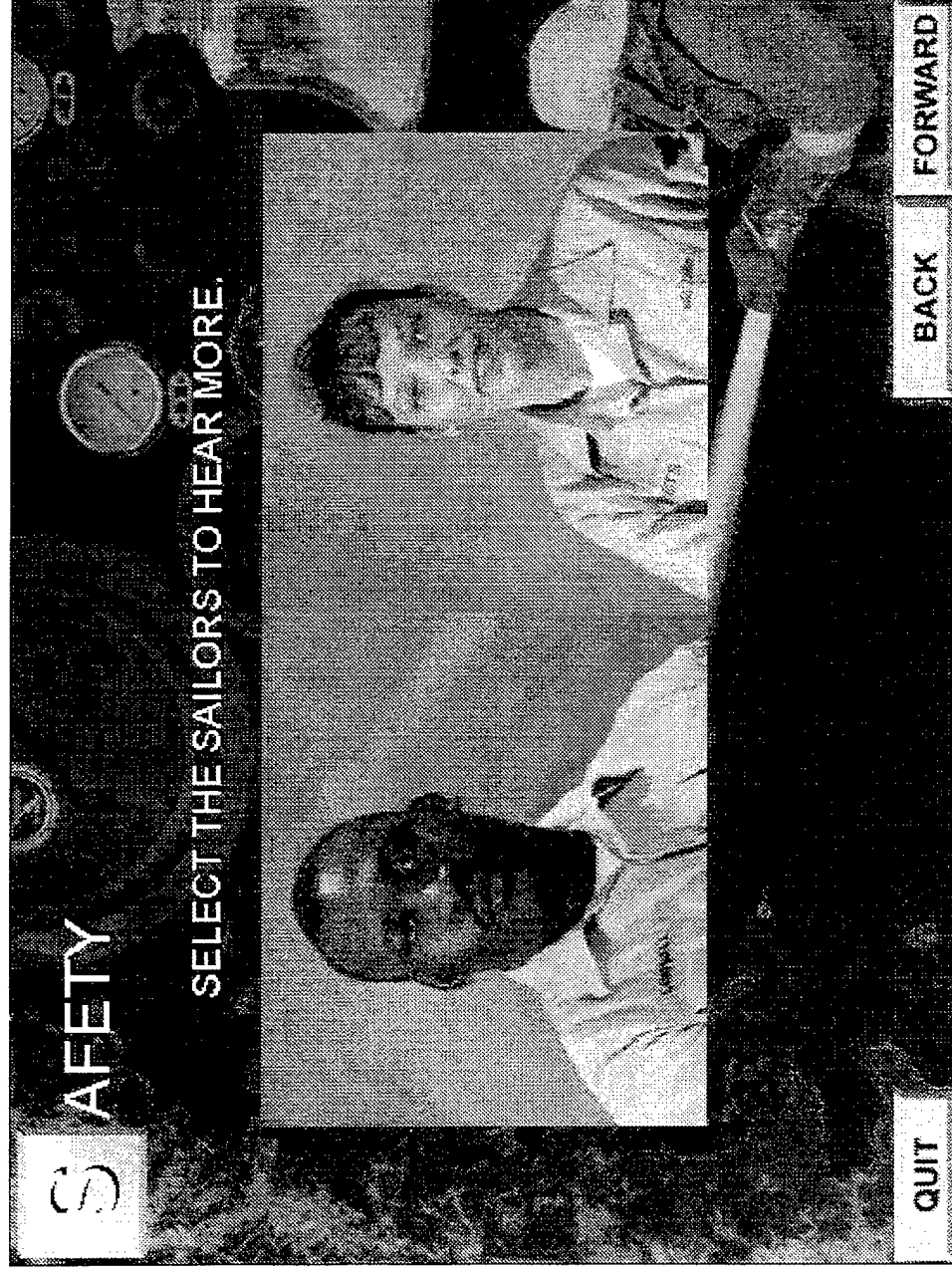
## Exercises

# Role Modeler



# Feedback

# Role Modeler



# Testimonials

**APPENDIX D**  
**ADMINISTRATIVE AND INTERVENTION**  
**DATA TABLES**



## **APPENDIX D**

### **ADMINISTRATIVE AND INTERVENTION DATA TABLES**

The administrative data and data concerning the students' interactions within the interventions are presented in the seven tables in this appendix. Six of the tables are included at the end of this appendix and described in paragraphs 1 through 6 below. The seventh table is included in paragraph 7 of this appendix.

#### **1. Administrative Data**

The Administrative Data table was used as an organizational tool to determine which recruits had completed all the necessary paperwork in order to include their data in the study. For an individual recruit, the following information is presented in the table:

- Social Security Number (SSAN)
- First and Last Name
- Gender
- Division Number
- Experimental Group
  - Advance Organizer, A
  - Role Model, R
  - Control, C
- Consent form completion
- Completion of Stress Profile questionnaire (pre/post-firefighting training)
- Exam score

#### **2. Pre-Stress**

The Pre-Stress table organizes the data gathered during the Stress Profile questionnaire given BEFORE the treatments and firefighting training. For an individual recruit the following information is presented:

- SSAN
- Experimental Group (Program)
  - Advance Organizer, AO
  - Role Model, RM
  - Control, C
- Gender
- Division Number
- Responses to Stress Profile questionnaire for all 40 questions (Q1-Q40) on a scale of 1 to 5 as related to the survey

#### **3. Post-Stress**

The Post-Stress table is similar to the Pre-Stress table but organizes the responses of the Stress Profile questionnaire given AFTER the treatments, firefighting training, and firefighting exam (exam #4). The same information is present but the responses are identified by PQ1-PQ40.

#### 4. Sdata

The Sdata table was generated from within the Advance Organizer. The following information was collected for each recruit (91 total) who interacted with the treatment.

- SSAN
- Session Time – amount of total time spent in the Advance Organizer including the test.
- First\_Selected – indicates the route the recruit chose to move through the AO.
  - Tutorial – linear tutorial method
  - Concept – concept/lesson map method
- Second\_Selected – indicates the recruit's second choice in the program, which is always the test.
- Third\_Selected – this variable was incorporated during early planning stages to track when the student moved between linear, concept, or test. In the current design it is not used.
- Role – sum total of the number of role-related questions (possible 8 maximum) a recruit clicked on while moving through the system. Answers to role questions consisted of video, photo stills, and audio elements. Questions are similar to "Why is it important for me to know this?" If the number is 2 or greater, the recruit was automatically fed role-related information for the remainder of the treatment.
- Remember – sum total of the number of remember-related questions (possible 10 maximum) a recruit clicked on while moving through the system. Answers to the remember questions consisted of a text and audio summary of the main points of a topic/chapter. If the number is 2 or greater, the recruit was automatically fed role-related information for the remainder of the treatment.
- Gender – sum total of the number of gender-related questions (possible 5 maximum) a recruit clicked on while moving through the system. Answers to gender questions consisted of video, photo stills, and audio. Example questions are "How heavy is the firefighting equipment?" and "Is it harder for females to serve as a firefighter?" If the number is 2 or greater, the recruit was automatically fed role-related information for the remainder of the treatment.
- LSQ\_1 – LSQ\_42 – Learning Style Questions (LSQ) were available for the recruit to choose on all of the instructional screens throughout the Advance Organizer. If a recruit chose a question, the table will show a "1." The LSQs are listed on the following page.

#### 5. Stest

The Stest table was also generated by the Advance Organizer. It holds all of the AO test data.

- SSAN
- Test\_Score – There are 20 questions, each worth 5 points for a total possible score of 100.
- Q1-Q20 – Indicates whether the recruit got the question correct (1) or incorrect (0). Questions that required more than one response (questions 3, 9, and 17) have more than one column to record the data for each part of the question. The answer to a multiple-part question had to be entirely correct for the student to receive the 5 points in the scoring.

## LEARNING STYLE QUESTIONS

Chapter	LSQ #	Question Type	Question
1	LSQ_1	Role	Why is it important for me to know this information?
1	LSQ_2	Like	How is this like something I already know?
1	LSQ_3	Remember	What exactly do I need to remember?
2	LSQ_4	Topic specific	How do I call the officer of the deck?
2	LSQ_5	Like	How is this like something I already know?
2	LSQ_6	Topic specific	How do I help the fire team when they arrive?
2	LSQ_7	Role	Why is it important for me to know this?
2	LSQ_8	Remember	What exactly do I need to remember?
3	LSQ_9	Topic specific	Who sounds the alarms?
3	LSQ_10	Like	How is this like something I already know?
3	LSQ_11	Role	I'm not a firefighter. Why is it important for me to know this?
3	LSQ_12	Remember	What exactly do I need to remember?
4	LSQ_13	Like	How is this like something I already know?
4	LSQ_14	Gender	Do women serve on all ships?
4	LSQ_15	Topic specific	Can you explain the identification system further?
4	LSQ_16	Role	Why is it important for me to remember this numbering system?
4	LSQ_17	Remember	What exactly do I need to remember?
5	LSQ_18	Topic specific	When is this information used in daily ship life?
5	LSQ_19	Gender	Who closes the fittings?
5	LSQ_20	Topic specific	What happens when an emergency situation is over?
5	LSQ_21	Role	Why is it important for me to know this?
5	LSQ_22	Remember	What exactly do I need to remember?
6	LSQ_23	Topic specific	Where is the device located?
6	LSQ_24	Topic specific	How does the device work?
6	LSQ_25	Role	Why is it important for me to know this?
6	LSQ_26	Remember	What exactly do I need to remember?
7	LSQ_27	Topic specific	How heavy is all the protective clothing?
7	LSQ_28	Topic specific	How long does it take to put on all the equipment?
7	LSQ_29	Topic specific	How many fires occur on board a ship?
7	LSQ_30	Remember	What exactly do I need to remember?
8	LSQ_31	Gender	Is it harder for females to perform as a firefighter?
8	LSQ_32	Role	I am not a DC-man. Why is it important for me to know this?
8	LSQ_33	Like	How is this information like something I already know?
8	LSQ_34	Remember	What exactly do I need to remember?
9	LSQ_35	Role	I'm not a DC-man. Why is this information important for me to know?
9	LSQ_36	Gender	Do females have problems using any of these systems because of the equipment weight?
9	LSQ_37	Topic specific	What happens if I use the wrong extinguishing agent or system?
9	LSQ_38	Topic specific	After recruit training, will I be further trained on these systems?
9	LSQ_39	Remember	What exactly do I need to remember?
10	LSQ_40	Gender	How heavy are the pumps and eductors?
10	LSQ_41	Topic specific	What are examples of how the different eductors are used?
10	LSQ_42	Remember	What exactly do I need to remember?

## 6. Srole

The Srole table was generated by the Role Model treatment. It consists of all recruit role model data gathered during the evaluation.

- SSAN
- Session Time – the entire time a recruit interacted with the Role Model treatment.
- First\_selected – the topic first selected (out of four possibilities) by the recruit from the main menu.
- Second\_selected – the topic selected second by the recruit. A recruit was able to exit the treatment at any time. If there is a “NONE” entered in the table, the recruit chose to exit the program before entering all of the possible topic areas (Teamwork, Leadership, Safety, Communication).
- Third\_selected – the topic selected third by the recruit.
- Fourth\_selected – the topic selected fourth by the recruit.
- E1\_3\_male, E1\_3\_female, E1\_3\_both – the E stands for exercise. The numbers (#\_#) refer to the storyboard frame numbers that describe a specific exercise or testimonial. Columns that are similar to these labels refer to the “testimonials” by the navy sailors. A male and female spoke on each of the four topics. If a recruit clicked on one of them to hear their comments, a “1” is entered in the column. If a recruit chose to hear both the male and female testimonials, a “1” is entered in the appropriate column.
- E2\_10\_Student Response, E2\_10\_Correct – the E stands for exercise. The numbers (#\_#) refer to the storyboard frame numbers used during the development process. The student response is the recruit’s answer to the question. The correct column indicates whether the student got the correct answer (1).
- E2\_12\_1\_a,b,c,d – the E stands for exercise. The numbers once again refer to the storyboard frame number. The a, b, c, d refer to the possible answers. If a recruit chose one of these a “true” is indicated in the table.

## 7. Recruit Participant and Time Data

The following tables show the number of recruits participating in the study by division and the amount of time in minutes it took the recruits to complete the interventions.

**NUMBER OF NON-PARTICIPATING RECRUITS**

<b>Division #</b>	<b>Total # Recruits</b>	<b>Participated</b>	<b>Difference*</b>
233 M	76	58	18
234 F	42	34	8
235 M	67	48	19
236 F	46	36	10
237 M	56	42	14
238 M	62	53	9
<b>TOTALS</b>	<b>349</b>	<b>271</b>	<b>78</b>

\*Difference is due to extenuating circumstances as described in Section II.A.4, “Procedures for Implementation of Interventions and Data Collection,” or to voluntary non-consent.

**SESSION TIME DESCRIPTIONS**  
(Minutes)

<b>Role Model</b>	
<b>Time Interval</b>	<b># Recruits</b>
20-29	3
30-39	52
40-49	24
50-59	10
60-69	1
70-79	1
<b>Total</b>	<b>91</b>

<b>Time (min)</b>	
Recruit Average	39
Recruit Median	38
Female Average	40
Female Median	37
Male Average	39
Male Median	38

<b>Advance Organizer</b>	
<b>Time Interval</b>	<b># Recruits</b>
10-19	3
20-29	0
30-39	12
40-49	40
50-59	21
60-69	7
70-79	5
80-89	2
90	1
<b>Total</b>	<b>91</b>

<b>Time (min)</b>	
Recruit Average	49
Recruit Median	47
Female Average	46
Female Median	45
Male Average	50
Male Median	50

SSAN	FirstName	LastName	Gender	Div #	Group	Consent	Pre SSQ	Post SSQ	Exam
002781065	Josh	Gardner	Male	233	C	x	x	x	3.8
029641195	KEVIN	DILLON	Male	233	A	x	x	x	4.4
042703652	DANIEL	NOVAK	Male	233	R	x	x	x	4.2
065728767	CHRISTOPHE	MATTE	Male	233	A	x	x	x	4.4
088662527	Christopher	Wolfert	Male	233	C	x	x	x	3.7
137865156	IAN	HELWIG	Male	233	A	x	x	x	4.9
227272077	KEVIN	MCGOWAN	Male	233	R	x	x	x	3.9
227418850	JEREMY	DUNN	Male	233	A	x	x	x	4.4
230410090	Brian	Minnick	Male	233	C	x	x	x	4.2
233316233	RYAN	CUTRIGHT	Male	233	R	x	x	x	4.7
235355563	JOSHUA	DEMPSEY	Male	233	R	x	x	x	4.0
240556411	Andre	Patterson	Male	233	C	x	x	x	4.4
245041869	ERIC	BEMISH	Male	233	A	x	x	x	4.8
291829141	Sterling	Hickman	Male	233	C	x	x	x	4.0
313967398	Jonathan	Voris	Male	233	C	x	x	x	4.8
316989493	Aaron	Zeiger	Male	233	C	x	x	x	3.4
320805335	MARCUS	BERTRAND	Male	233	R	x	x	x	4.7
328685245	ROBERTO	RAMOS	Male	233	A	x	x	x	4.5
330681212	Manuel	Ortiz	Male	233	C	x	x	x	4.3
330724123	QUYNTEN	MC GEE	Male	233	R	x	x	x	3.4
360669734	GREG	THEISMANN	Male	233	A	x	x	x	4.8
361745659	Robert	Murray	Male	233	C	x	x	x	4.5
363925421	Derek	Fryer	Male	233	C	x	x	x	4.0
396869815	BRIAN	SCHILLING	Male	233	R	x	x	x	4.2
429671807	James	Gay	Male	233	C	x	x	x	4.0
433733185	DARYL	JACKSON	Male	233	R	x	x	x	4.7
434698831	JEFFREY	LANCASTER	Male	233	A	x	x	x	4.6
437211754	RONALD	GUILLOT	Male	233	A	x	x	x	4.6
438435862	KENNETH	RELEFORD	Male	233	A	x	x	x	4.0
447745299	Jonathan	Howard	Male	233	C	x	x	x	4.3
450957390	Bradley	Lindeman	Male	233	C	x	x	x	4.0
452634332	Timothy	Seymour	Male	233	C	x	x	x	4.2
457657206	JAMES	BROOKS	Male	233	A	x	x	x	4.2
463796866	LARRY	GIPSON	Male	233	R	x	x	x	4.0
483903771	SCOTT	CLARK	Male	233	A	x	x	x	4.7
487946653	Matthew	Warhover	Male	233	C	x	x	x	4.5
515766180	GEORGE	MORTELL	Male	233	R	x	x	x	4.8
517119820	AARON	PATTERSON	Male	233	R	x	x	x	4.6
517863523	VINCENT	ALCORN	Male	233	R	x	x	x	4.40
520889977	NICHOLAS	FLUTY	Male	233	R	x	x	x	4.6
525677055	Nicholas	Brandt	Male	233	C	x	x	x	4.4
527933369	Joshua	Stuart	Male	233	C	x	x	x	4.5
530965411	Eric	Gyger	Male	233	C	x	x	x	4.2
540928468	Jade	Holloway	Male	233	C	x	x	x	4.8
543176102	PAUL	MEHRING	Male	233	R	x	x	x	4.4
543257262	Andrew	Owens	Male	233	C	x	x	x	4.4
545578423	ANTHONY	JOHNSON	Male	233	A	x	x	x	4.7

SSAN	FirstName	LastName	Gender	Div #	Group	Consent	Pre SSQ	Post SSQ	Exam
553794902	TERENCE	JUERGENS	Male	233	R	x	x	x	4.8
572613258	PATRICK	CURNYN	Male	233	A	x	x	x	3.2
575821013	Michael	O'Donnell	Male	233	C	x	x	x	3.8
576672514	DORLITO	SENSANO	Male	233	R	x	x	x	3.9
601645120	BRADLEY	MURREN	Male	233	R	x	x	x	4.4
602886386	EUGENE	CALIBOSO	Male	233	A	x	x	x	4.5
603050323	BRIAN	MILLER	Male	233	A	x	x	x	4.1
615050908	Donald	Byrne	Male	233	C	x	x	x	4.3
622581907	ERWIN	BAYQUEN	Male	233	R	x	x	x	4.20
623829329	Astor	Mojica	Male	233	C	x	x	x	4.0
625721795	JASON	PHILLIPS	Male	233	A	x	x	x	4.4
031667507	LAUREN	TRAVERS	Female	234	R	x	x	x	3.6
082646921	Liza	Solon	Female	234	C	x	x	x	3.8
150642918	SHALAWN	SMITH	Female	234	A	x	x	x	3.2/3.23
166667854	CELESTE	RENWICK	Female	234	A	x	x	x	4.7
216155550	Kimberly	Diver	Female	234	C	x	x	x	4.3
224490960	BRANDY	PEEBLES	Female	234	A	x	x	x	3.7
227319491	Antonia	Patterson	Female	234	C	x	x	x	3.8
229137935	MARY	IPPERT	Female	234	A	x	x	x	4.3
234331672	JULIE	SAVILLA	Female	234	A	x	x	x	4.3
253151461	JEJUANA	JOHNSON	Female	234	R	x	x	x	3.6
254270747	AMY	ROBINSON	Female	234	R	x	x	x	3.2/3.68
254471605	LATONGA	O'NEAL	Female	234	A	x	x	x	3.2/3.6
254634848	ANGELA	JONES	Female	234	R	x	x	x	4.3
262950050	JANINE	VILLOT	Female	234	A	x	x	x	4.6
278880006	HEATHER	RUFFNER	Female	234	R	x	x	x	3.6
282882452	JENI	WILEY	Female	234	A	x	x	x	3.8
322680935	PATRICIA	MCCORKLE	Female	234	R	x	x	x	3.4
360747390	STEPHENIE	GAINES	Female	234	R	x	x	x	4.5
363820374	LUCINDA	MOORE	Female	234	A	x	x	x	3.8
371022442	LAURIE	RANDALL	Female	234	A	x	x	x	3.9
399663249	RITA	KLUMB	Female	234	A	x	x	x	4.3
438335318	Dari	Taylor	Female	234	C	x	x	x	4.6
464475757	Stefanie	Walden	Female	234	C	x	x	x	4.1
474963732	Debbi	Scheunemann	Female	234	C	x	x	x	3.5
482029134	LORENE	DEVICK	Female	234	R	x	x	x	3.7
484084146	GODIVA	DEGUZMAN	Female	234	A	x	x	x	4.4
519086140	Lisa	Todd	Female	234	C	x	x	x	4.0
540338365	ALICIA	ESPINOSA	Female	234	R	x	x	x	4.0
542116556	REBECCA	MEYERS	Female	234	A	x	x	x	4.2
554554507	MONIC	LEE	Female	234	R	x	x	x	4.2
609721269	VONNY	SEROTA	Female	234	A	x	x	x	4.5
610100041	Cynthia	Moore	Female	234	C	x	x	x	4.4
614070751	Brandi	Dalton	Female	234	C	x	x	x	3.5
619249850	Stacy	Sullivan	Female	234	C	x	x	x	4.0
006963714	CHRISTOPHE	GIDDENS	Male	235	R	x	x	x	4.1
010704280	Sean	Burke	Male	235	C	x	x	x	3.6

SSAN	FirstName	LastName	Gender	Div #	Group	Consent	Pre SSQ	Post SSQ	Exam
052622327	Kazi	Hunter	Male	235	C	x	x	x	4.0
110600462	AARON	JENKINS	Male	235	A	x	x	x	4.5
137669309	REGINALD	RICHARDSON	Male	235	A	x	x	x	3.8
173661863	MICHAEL	KLINE	Male	235	R	x	x	x	3.5
186680564	Joseph	Smith	Male	235	C	x	x	x	3.2
211542430	JOHN	COYNE	Male	235	A	x	x	x	4.0
249733936	JOHN	PISTOLIS	Male	235	A	x	x	x	4.0
258614057	Phillip	Doss	Male	235	C	x	x	x	4.1
258635235	Rudolph	Knight	Male	235	C	x	x	x	3.3
264875300	CHARLES	GUYTON	Male	235	A	x	x	x	4.1
283829092	NICHOLAS	SINGER	Male	235	R	x	x	x	3.8
316043486	JUSTIN	BAKER	Male	235	R	x	x	x	3.2/4.26
317785093	Gregg	Manor	Male	235	C	x	x	x	3.7
321646714	TROY	CLAY	Male	235	R	x	x	x	3.8
332727126	EDWARD	BERRY	Male	235	R	x	x	x	4.2
351665179	EARL	TAYLOR	Male	235	A	x	x	x	3.9
354685620	MARK	METCALF	Male	235	A	x	x	x	3.2/4.21
355688151	Brady	Westberry	Male	235	C	x	x	x	4.2
363065998	S.C.	GEHL	Male	235	A	x	x	x	3.8
423131466	TRAVIS	PERKINS	Male	235	A	x	x	x	4.2
434596439	CLIFFORD	MARTIN	Male	235	R	x	x	x	3.2
434656760	ROBERTO	LOPEZ	Male	235	R	x	x	x	4.5
440929027	JIMMY	HOLLEY	Male	235	R	x	x	x	4.1
445840185	JASON	CRANE	Male	235	R	x	x	x	3.2
447929634	Knox	Henderson	Male	235	C	x	x	x	4.5
449972440	David	Doyal	Male	235	C	x	x	x	3.9
455878195	Carey	Garneau	Male	235	C	x	x	x	4.0
458854617	JASON	SMITH	Male	235	A	x	x	x	3.6
464914268	JASON	DARBY	Male	235	A	x	x	x	4.1
467516569	David	Castro	Male	235	C	x	x	x	3.9
476297826	Edward	Stoessel	Male	235	C	x	x	x	4.3
517762376	JOSHUA	BEAUMONT	Male	235	A	x	x	x	4.4
530236755	Grant	Potter	Male	235	C	x	x	x	4.3
531111250	JUSTIN	BOURM	Male	235	R	x	x	x	4.1
559590848	ALLEN	BOSSARD	Male	235	A	x	x	x	4.3
559657568	Reid	Brown	Male	235	C	x	x	x	4.4
566596933	William	Day	Male	235	C	x	x	x	4.6
566696912	MICHAEL	ANDERSON	Male	235	A	x	x	x	3.9
569592790	JOSHUA	CABALLERO	Male	235	R	x	x	x	3.9
571476142	FRANK	KNAPP	Male	235	A	x	x	x	4.0
573978737	WES	VILLAGOMEZ	Male	235	R	x	x	x	4.4
574862977	CASEY	LINTON	Male	235	A	x	x	x	3.7
585296217	Anthony	Hughes	Male	235	C	x	x	x	4.0
591509963	PATRICK	TAYLOR	Male	235	R	x	x	x	4.2
606566424	ABNER	ABRAZALDO	Male	235	A	x	x	x	3.5
620020982	JAY SANTIAG	ABLOG	Male	235	R	x	x	x	3.3
097720977	Heather	Derringer	Female	236	C	x	x	x	3.3



SSAN	FirstName	LastName	Gender	Div #	Group	Consent	Pre SSQ	Post SSQ	Exam
098565025	Tania	Davila	Female	236	C	x	x	x	3.6
124600339	DEBORAH	DUFF	Female	236	A	x	x	x	3.9
154784818	TINA	STULGA	Female	236	A	x	x	x	4.2
185646161	TRACEY	IMHOFF	Female	236	R	x	x	x	4.4
204547214	GEORGIA	SCHOEN	Female	236	R	x	x	x	4.4
227150718	JOLENE	PAYNE	Female	236	A	x	x	x	4.3
230270302	KAREN	COX	Female	236	R	x	x	x	3.2/3.64
239397670	HEATHER	COOPER	Female	236	A	x	x	x	3.9
257310338	Deborah	Weaver	Female	236	C	x	x	x	4.6
262857331	PATRICIA	JONES	Female	236	R	x	x	x	3.3
288867569	JENNIFER	BAHR	Female	236	A	x	x	x	3.5
302806747	ANGELINA	HENDON	Female	236	A	x	x	x	4.6
420983860	LaShawna	Swoopes	Female	236	C	x	x	x	4.0
425511051	BEVERLY	CHADWICK	Female	236	R	x	x	x	3.9
431350965	Jennifer	Zetty	Female	236	C	x	x	x	3.9
432619135	Kylie	Cain	Female	236	C	x	x	x	4.2
433730373	AYANA	BOURGEOIS	Female	236	A	x	x	x	3.2/4.47
464414791	LATARSHA	KENDRICK	Female	236	R	x	x	x	3.6
508984677	Mandy	James	Female	236	C	x	x	x	4.1
517760145	BRANDY	BEAGLE	Female	236	A	x	x	x	3.9
520988077	Kelly	Troutt	Female	236	C	x	x	x	4.5
525696126	MELISSA	BARELA	Female	236	R	x	x	x	3.3
529536789	VICKIE	KARTCHNER	Female	236	R	x	x	x	3.7
533822382	Tara	Hayes	Female	236	C	x	x	x	4.5
535060532	April	McDonald	Female	236	C	x	x	x	3.4
542026971	SUSAN	BERGSTROM	Female	236	R	x	x	x	4.3
542250929	SHEILA	WINONA	Female	236	A	x	x	x	3.6
543024941	ELIZABETH	STEWART	Female	236	R	x	x	x	3.9
544219405	AMANDA	KAMPMILLER	Female	236	A	x	x	x	4.6
558992533	Robyn	Nelson	Female	236	C	x	x	x	3.2/4.63
591668346	MELISSA	LEWIS	Female	236	A	x	x	x	3.8
595907581	ESTIVALIZ	QUINTANA	Female	236	A	x	x	x	4.0
613604179	TARADEEN	MORGAN	Female	236	R	x	x	x	4.5
616961147	TAMMANY	ATIENZA	Female	236	R	x	x	x	4.0
621348806	CHRISTEN	BRANCH	Female	236	R	x	x	x	4.4
001725988	BRIAN	TOMASELLI	Male	237	R	x	x	x	4.2
036460150	Mario	Belluscio	Male	237	C	x	x	x	3.4
037527379	Brett	Albee	Male	237	C	x	x	x	4.4
097745538	SEAN	WILLIAMS	Male	237	R	x	x	x	3.9
180608755	JOSEPH	MCKELVEY	Male	237	R	x	x	x	4.2
227379153	Stephen	Kidd	Male	237	C	x	x	x	4.6
232257468	WILLIAM	CALVERT	Male	237	A	x	x	x	4.6
248490686	Rayfield	Gordon	Male	237	C	x	x	x	4.3
248491184	ANTONIO	ROBINSON	Male	237	A	x	x	x	3.7
250690120	KENNETH	GREEN	Male	237	A	x	x	x	4.7
255636863	HECTOR	RODRIGUEZ	Male	237	R	x	x	x	4.6
256063246	Stacey	Mobley	Male	237	C	x	x	x	3.6

SSAN	FirstName	LastName	Gender	Div #	Group	Consent	Pre SSQ	Post SSQ	Exam
257610080	JASON	MOSS	Male	237/A	X	X	X		4.6
260639093	BRIAN	BELCHER	Male	237/R	X	X	X		4.3
335621921	DEMOND	WIGFALL	Male	237/A	X	X	X		3.8
352766571	COLIN	SPRINGER	Male	237/A	X	X	X		4.5
353762840	JAIME	OCHOA	Male	237/A	X	X	X		4.8
411412271	MICHAEL	TURPIN	Male	237/A	X	X	X		4.7
435531753	BRANDON	LORENTZ	Male	237/R	X	X	X		4.2
438557878	CHARLES	JOHNSON	Male	237/A	X	X	X		4.1
442743716	MICHAEL	STEWART	Male	237/R	X	X	X		4.1
443940347	JANOS	SAGI	Male	237/R	X	X	X		4.5
452695478	BRUCE	HIMELRIGHT	Male	237/A	X	X	X		4.2
457613198	JASON	KOSTER	Male	237/R	X	X	X		4.1
466777265	KHAMMAY	NORKEO	Male	237/R	X	X	X		3.4
467416882	DANIEL	REYNA	Male	237/A	X	X	X		4.5
474155312	JOSEPH	ROSS	Male	237/R	X	X	X		4.0
476029798	Adam	Martinson	Male	237/C	X	X	X		4.6
506139016	Anthony	Staman	Male	237/R	X	X	X		4.6
520901080	Christopher	Gibson	Male	237/C	X	X	X		4.3
524470521	JOHN	THATCHER	Male	237/A	X	X	X		4.6
526810212	Christopher	Matthews	Male	237/C	X	X	X		3.6
530936406	ARNOLD	MANCIA	Male	237/R	X	X	X		4.6
538967932	JonPaul	Marquis	Male	237/C	X	X	X		4.6
540253293	BRIAN	GRUBBS	Male	237/R	X	X	X		4.4
563537061	DAMON	JENKINS	Male	237/A	X	X	X		4.4
566799763	MICHAEL	ASHWORTH	Male	237/R	X	X	X		4.6
604387047	L	Gueorguieua	Male	237/C	X	X	X		4.6
606054477	Andrew	Crawford	Male	237/C	X	X	X		4.8
606980444	JoePhaz	Sanchez	Male	237/C	X	X	X		4.2
607014689	DOMINIC	VEAL	Male	237/A	X	X	X		3.2
613741803	CELERINO	MERCADO	Male	237/R	X	X	X		3.2
027585631	JESSE	SAYER	Male	238/R	X	X	X		4.3
082603709	Jeffrey	DelGrange	Male	238/C	X	X	X		4.6
082869967	SHLIEMANN	GERLUS	Male	238/R	X	X	X		3.9
092724434	RICHARD	RABAGLIA	Male	238/A	X	X	X		3.9
102845463	HATIM	TALIBI	Male	238/A	X	X	X		4.0
116862352	CHARLES	ADUFOKUO	Male	238/A	X	X	X		4.8
117600388	KARAM	CUMMINGS	Male	238/A	X	X	X		4.7
124724689	PABLO	FINELLI	Male	238/A	X	X	X		4.6
128649038	TERRENCE	SINGLETON	Male	238/R	X	X	X		3.7
205483391	DURON	DEANSMITH	Male	238/R	X	X	X		3.9
231415921	Rodney	Boyd	Male	238/C	X	X	X		4.2
234195524	David	Oliveto	Male	238/C	X	X	X		4.2
243572953	ROBERT	MORRIS	Male	238/A	X	X	X		3.8
244153504	COREY	NESBIT	Male	238/R	X	X	X		4.2
252572948	SHEABIAN	MAPP	Male	238/R	X	X	X		4.0
263855201	Paul	Brooks	Male	238/C	X	X	X		4.2
362888195	WILLIAM	LEMIEUX	Male	238/R	X	X	X		3.9

SSAN	FirstName	LastName	Gender	Div #	Group	Consent	Pre SSQ	Post SSQ	Exam
374885896	ROBERT	HOLLINS	Male	238	R	x	x	x	3.7
401176347	ROBERT	SEARCY	Male	238	A	x	x	x	3.3
414314654	Jason	Thurston	Male	238	C	x	x	x	4.2
418156086	ANTONIO	MARTIN	Male	238	R	x	x	x	4.4
420233024	CHRISTOPHE	BAZEMORE	Male	238	R	x	x	x	4.0
422271001	Joseph	Appleby	Male	238	C	x	x	x	4.6
437357405	PHILLIP	BERNARD	Male	238	R	x	x	x	4.0
438553157	David	Johnson	Male	238	C	x	x	x	4.8
444887828	JOSHUA	DUPY	Male	238	R	x	x	x	4.1
449775825	JUAN	MANZANO	Male	238	R	x	x	x	4.2
454834818	Jeffrey	Reynolds	Male	238	C	x	x	x	3.6
454937900	Don	Pierce	Male	238	C	x	x	x	4.2
495867580	SHA'WN	REYNOLDS	Male	238	R	x	x	x	4.4
512948854	CANNON	WOOFER	Male	238	A	x	x	x	4.5
528539383	MICHAEL	TIMMERMAN	Male	238	A	x	x	x	4.0
533964715	Mat	BradleyWest	Male	238	C	x	x	x	4.4
538312181	REY NAZARE	BERMUDEZ	Male	238	R	x	x	x	3.5
542963225	Joseph	Petersen	Male	238	C	x	x	x	3.2
548530082	BRENT	MURPHY	Male	238	R	x	x	x	3.7
551474418	ROSCOE	SMITH	Male	238	A	x	x	x	3.4
551692710	ELROY	SERANO	Male	238	R	x	x	x	4.0
554691845	David	Schultz	Male	238	C	x	x	x	4.7
564935426	Jenner	Castillo	Male	238	C	x	x	x	4.4
575396164	JIE	LIN	Male	238	A	x	x	x	4.6
579827691	NICKY	RUFFIN	Male	238	A	x	x	x	3.4
589786914	CHRISTOPHE	RHODES	Male	238	A	x	x	x	4.4
602887400	ARESTIDES	ECHON	Male	238	A	x	x	x	3.3
610026164	GABRIEL	OBEDOZA	Male	238	A	x	x	x	4.9
611053196	JOHN	CONTRERAS	Male	238	R	x	x	x	4.7
614808064	Do Soo	Lee	Male	238	C	x	x	x	4.7
615188707	MORONI	RODRIGUEZPE	Male	238	R	x	x	x	3.2
615427249	ADOLFO	NATIVIDAD	Male	238	A	x	x	x	4.2
617568991	JORGE	BATIZ	Male	238	A	x	x	x	4.7
624056227	Joshua	Weatherford	Male	238	C	x	x	x	4.1
624981125	Marlon	DeGuzman	Male	238	C	x	x	x	4.7
635071198	Dien	Hua	Male	238	C	x	x	x	4.2

SSN	Prog	Gender	Div	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
001725988	RM	M	237	2	4	3	3	4	5	3	3	4	3	4	3	3	4	3
002781065	C	M	233	1	2	4	4	5	5	4	3	4	3	1	3	3	4	4
006963714	RM	M	235	3	3	3	2	5	5	1	2	4	4	1	2	3	5	4
010704280	C	M	235	2	4	3	3	4	5	2	3	3	3	3	3	3	3	3
027585631	RM	M	238	3	1	1	2	1	1	3	3	2	2	4	5	4	4	1
029641195	AO	M	233	3	4	3	3	5	4	4	3	3	3	4	4	5	4	2
031667507	RM	F	234	3	3	3	3	4	4	2	4	1	2	5	5	5	5	3
036460150	C	M	237	2	4	0	4	3	4	4	5	4	3	4	4	2	3	4
037527379	C	M	237	1	1	4	3	4	5	3	3	1	5	4	3	3	5	1
042703652	RM	M	233	2	3	3	3	4	4	3	3	3	3	3	3	3	4	3
052622327	C	M	235	2	2	3	3	3	5	2	3	3	2	4	3	3	4	3
065728767	AO	M	233	2	3	4	2	4	4	2	2	3	3	4	3	3	2	3
082603709	C	M	238	3	3	4	5	5	5	4	5	3	2	5	3	3	4	3
082646921	C	F	234	4	4	4	2	2	5	4	4	5	4	0	5	4	5	3
082869967	RM	M	238	4	1	2	4	5	5	4	2	1	4	5	5	5	5	4
088662527	C	M	233	2	2	3	4	3	4	2	3	2	3	4	3	3	2	1
092724434	AO	M	238	2	2	4	4	2	5	4	3	2	4	5	4	4	5	1
097720977	C	F	236	1	2	0	3	4	4	2	3	2	2	3	3	3	4	1
097745538	RM	M	237	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1
098565025	C	F	236	1	1	5	5	5	5	1	3	1	3	5	4	5	5	3
102845463	AO	M	238	2	4	4	3	2	5	3	2	3	2	5	5	5	5	3
110600462	AO	M	235	1	5	3	2	3	5	1	3	3	3	5	3	3	5	3
116862352	AO	M	238	3	4	4	4	4	4	4	3	3	4	4	4	4	4	2
117600388	AO	M	238	0	0	4	0	4	5	4	4	4	5	2	4	4	4	4
124600339	AO	F	236	1	3	3	0	4	1	3	3	3	3	4	3	0	3	3
124724689	AO	M	238	3	3	3	3	3	3	5	3	3	3	5	3	3	5	5
128649038	RM	M	238	2	3	3	3	5	3	1	3	3	3	5	3	3	5	3
137669309	AO	M	235	3	5	3	0	4	1	5	1	3	5	1	4	5	5	1
137865156	AO	M	233	3	3	3	3	3	4	1	3	3	3	2	3	3	3	3
150642918	AO	F	234	1	3	3	2	3	4	1	3	2	1	3	1	3	2	0
154784818	AO	F	236	1	4	3	3	4	5	1	3	3	3	4	3	3	5	3
166667854	AO	F	234	2	3	4	2	5	5	4	3	3	4	4	4	4	5	3
173661863	RM	M	235	3	2	5	2	5	5	3	2	2	3	5	4	5	5	2
180608755	RM	M	237	2	2	4	3	5	5	3	5	5	3	5	4	3	5	5
185646161	RM	F	236	1	3	3	3	5	5	3	3	3	3	5	3	3	5	3
186680564	C	M	235	1	3	3	3	5	4	3	3	5	3	3	3	3	3	3
204547214	RM	F	236	2	3	2	2	4	4	5	3	3	2	5	3	4	5	2
205483391	RM	M	238	2	5	3	4	2	3	2	3	2	1	3	3	3	4	2
211542430	AO	M	235	2	3	3	3	4	4	3	3	3	3	4	3	3	3	3
216155550	C	F	234	2	3	4	3	4	2	2	3	3	3	4	3	3	4	3
224490960	AO	F	234	1	3	1	1	1	5	1	1	1	1	1	1	1	1	1
227150718	AO	F	236	2	3	3	2	4	4	2	2	4	2	4	3	2	4	4
227272077	RM	M	233	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
227319491	C	F	234	1	1	2	2	5	5	1	4	5	1	5	1	1	3	1
227379153	C	M	237	1	3	3	2	5	5	4	5	1	2	5	2	3	5	2
227418850	AO	M	233	2	3	3	3	4	4	2	3	1	3	4	3	3	5	1
229137935	AO	F	234	1	4	3	2	4	4	2	3	4	3	4	2	2	4	4

Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35
3	3	3	5	4	4	2	4	2	3	4	1	4	2	4	3	2	2	2	2
4	4	4	2	3	5	1	3	5	4	5	1	3	1	5	4	1	1	4	1
2	2	2	1	4	5	4	2	2	4	1	2	2	1	4	5	1	1	3	1
3	3	3	2	3	4	3	3	3	4	4	1	3	4	3	2	3	3	3	1
4	3	3	5	3	5	4	2	2	2	4	1	5	2	1	2	3	1	3	2
4	4	4	2	4	4	4	4	5	5	3	1	5	2	3	4	1	2	3	2
3	4	1	2	3	5	3	3	4	4	4	1	3	1	3	4	1	1	5	1
2	0	1	1	1	3	1	2	1	2	2	1	0	4	5	4	5	0	5	5
3	3	2	4	3	5	1	3	2	3	3	1	3	1	1	3	1	1	3	1
3	4	3	2	5	5	3	3	4	5	5	3	3	3	3	4	3	3	4	4
3	3	1	1	3	5	3	3	3	2	2	1	3	2	3	2	3	2	1	1
3	3	3	2	3	4	3	3	3	3	2	2	3	3	2	3	2	2	3	2
3	5	4	3	3	4	3	3	4	3	2	2	3	3	2	2	3	3	2	3
4	4	2	1	3	4	2	4	1	4	3	1	4	2	3	4	3	1	4	1
4	5	1	2	4	5	2	4	1	4	5	2	4	1	5	5	1	3	4	1
4	2	2	4	3	2	3	3	3	4	2	1	2	1	1	3	1	1	3	2
4	4	1	2	2	5	2	4	0	2	2	1	2	1	3	4	1	3	2	1
3	3	2	2	3	3	3	3	2	3	2	1	3	3	2	3	2	2	2	2
1	1	4	1	4	2	2	3	2	3	4	4	3	1	5	5	1	1	1	1
5	5	4	1	3	5	4	4	5	4	2	1	5	4	3	2	4	4	2	1
5	5	1	2	3	5	2	3	2	4	4	1	3	1	3	4	3	3	4	1
3	3	1	1	3	4	3	3	5	5	1	1	3	1	4	2	2	1	1	4
4	4	1	4	2	4	2	4	2	4	2	2	4	3	4	4	2	3	4	2
5	4	3	1	4	5	5	5	4	4	3	2	4	2	3	4	1	1	3	1
3	3	3	3	3	3	3	3	4	3	3	3	3	0	1	4	4	2	2	2
3	3	4	2	4	5	3	3	3	3	2	2	3	1	1	5	3	1	5	1
3	4	3	3	3	5	3	3	3	3	4	1	3	2	2	4	3	2	4	2
4	1	3	4	3	5	5	1	5	1	3	5	2	1	3	3	3	3	4	1
3	3	2	2	3	1	3	3	4	3	4	5	3	2	3	3	2	2	3	2
3	2	1	1	2	4	2	1	3	2	1	2	2	2	3	3	3	3	3	1
3	2	1	1	3	2	3	3	3	4	1	1	3	2	4	4	3	1	3	1
3	5	2	2	3	4	2	3	3	4	3	1	3	1	4	4	1	1	4	1
4	3	3	1	3	5	3	5	5	5	4	1	3	2	5	3	2	1	3	1
3	3	4	1	3	5	3	2	2	2	3	3	5	1	2	1	1	1	3	1
3	3	3	1	3	4	3	3	3	3	2	3	3	1	2	3	2	2	3	2
4	3	3	1	3	3	3	3	3	3	1	5	3	2	5	3	2	2	4	2
3	3	2	2	3	5	4	3	2	3	2	2	3	2	3	3	2	3	2	1
3	3	2	4	3	4	2	3	2	3	3	3	3	3	2	3	3	3	3	3
3	3	4	2	3	4	2	3	2	3	2	2	3	1	3	2	1	3	2	1
3	1	3	2	4	4	2	3	3	3	1	2	3	3	2	1	4	3	3	2
1	1	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	3	4	4	4	1	4	3	2	4	3	2	3	1	4	5	3	2	2	3
3	5	3	3	3	3	3	3	3	3	3	3	3	2	1	1	2	2	1	2
1	5	1	3	2	1	1	3	1	5	3	1	1	1	4	4	1	1	4	1
2	2	2	2	4	4	2	2	2	4	2	2	3	1	2	2	4	4	4	3
3	4	3	2	3	5	3	3	3	4	3	2	3	2	2	3	2	2	2	2
3	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Q36	Q37	Q38	Q39	Q40
4	2	3	3	3
5	1	1	4	5
5	2	2	4	5
4	3	3	3	3
4	2	3	2	2
3	4	4	0	0
5	1	2	5	5
0	5	0	1	5
5	1	1	4	5
4	3	2	4	5
4	2	2	2	5
3	1	2	3	2
3	2	2	3	3
5	3	1	4	5
5	1	1	4	5
4	1	2	3	5
4	1	1	5	0
3	2	2	3	3
1	1	5	5	0
4	1	1	5	4
5	1	1	4	5
4	2	4	4	4
4	2	2	4	3
5	2	2	3	5
3	0	2	2	1
5	5	1	5	5
4	2	2	5	4
2	5	2	4	3
4	3	3	3	3
3	1	3	5	2
5	1	2	4	5
1	2	4	5	0
5	1	1	5	5
3	1	3	3	3
5	2	3	3	1
4	2	2	4	4
3	2	1	3	2
3	3	2	3	3
4	1	1	2	5
2	2	3	2	2
1	1	1	1	1
5	1	2	4	4
1	1	2	1	1
4	1	1	4	5
4	3	4	3	1
3	2	3	2	3
0	0	0	0	0

SSN	Prog	Gender	Div	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
230270302	RM	F	236	3	4	3	2	5	5	3	3	3	2	5	5	5	5	5
230410090	C	M	233	3	4	5	3	4	3	2	1	1	3	3	3	4	4	2
231415921	C	M	238	5	2	5	4	5	5	5	5	1	5	5	5	5	5	5
232257468	AO	M	237	4	3	4	4	5	5	4	5	3	3	5	3	4	5	2
233316233	RM	M	233	3	3	4	3	5	5	3	3	3	3	5	3	3	4	0
234195524	C	M	238	3	4	4	5	5	5	4	3	3	4	3	3	4	4	4
234331672	AO	F	234	4	4	1	4	5	5	5	4	4	1	5	5	5	5	5
235355563	RM	M	233	2	2	2	3	3	2	3	3	3	3	2	2	3	1	2
239397670	AO	F	236	1	4	3	1	4	5	2	3	3	3	5	4	3	5	4
240556411	C	M	233	2	4	3	2	5	5	2	5	5	2	5	3	3	5	5
243572953	AO	M	238	4	3	3	2	4	5	2	3	3	3	1	4	3	5	5
244153504	RM	M	238	3	2	3	0	0	1	4	5	3	2	5	4	4	5	3
245041869	AO	M	233	1	4	4	2	3	4	1	3	3	2	4	3	2	3	3
248490686	C	M	237	1	1	1	1	5	5	1	0	5	1	5	1	5	5	5
248491184	AO	M	237	2	4	4	3	5	5	4	4	4	4	4	4	4	4	4
249733936	AO	M	235	3	5	3	3	5	5	2	3	3	3	5	5	5	5	3
250690120	AO	M	237	3	5	3	4	5	5	4	3	2	4	3	4	3	4	2
252572948	RM	M	238	4	1	3	3	4	5	2	3	3	4	3	3	3	5	1
253151461	RM	F	234	1	4	4	4	1	5	1	1	1	2	5	0	4	0	4
254270747	RM	F	234	3	5	4	4	5	5	3	3	3	3	5	4	4	5	3
254471605	AO	F	234	4	2	4	2	5	5	5	2	1	5	2	5	5	5	1
254634848	RM	F	234	2	2	4	2	5	5	2	3	2	2	3	2	2	4	4
255636863	RM	M	237	1	1	2	4	5	5	2	2	2	2	5	4	4	5	2
256063246	C	M	237	2	4	4	3	2	1	4	3	1	0	4	5	3	4	4
257310338	C	F	236	2	1	3	4	5	5	1	3	3	3	4	4	3	4	3
257610080	AO	M	237	3	3	3	5	5	5	5	3	3	3	5	5	3	3	4
258614057	C	M	235	5	3	3	3	5	5	1	3	3	3	5	3	3	5	3
258635235	C	M	235	4	3	4	3	4	4	5	4	4	4	5	4	5	5	4
260639093	RM	M	237	4	1	1	1	1	1	1	3	2	2	1	1	1	5	1
262857031	RM	F	236	2	4	3	2	4	2	3	3	3	3	3	2	4	4	3
262950050	AO	F	234	1	1	3	2	5	5	1	3	3	3	4	3	3	4	3
263855201	C	M	238	2	5	3	2	5	5	3	5	3	5	5	5	3	5	3
264875300	AO	M	235	3	4	3	3	4	5	4	3	3	3	5	3	3	4	3
278880006	RM	F	234	2	0	4	5	4	1	0	3	4	5	3	5	4	4	5
282882452	AO	F	234	1	2	3	3	4	5	2	3	3	3	4	4	3	4	3
283829092	RM	M	235	2	3	3	3	3	3	3	3	2	3	3	3	3	4	3
288867569	AO	F	236	2	3	3	3	3	4	2	4	3	3	4	3	3	4	3
291829141	C	M	233	2	3	5	2	4	5	4	3	4	3	4	3	3	5	3
302806747	AO	F	236	1	1	4	3	5	5	2	2	3	1	5	3	3	5	4
313967398	C	M	233	2	2	4	3	4	0	2	3	3	3	2	2	2	2	3
316043486	RM	M	235	3	4	4	3	5	5	3	5	3	4	5	5	5	5	1
316989493	C	M	233	1	1	1	1	4	4	1	1	1	1	4	1	1	1	1
317785093	C	M	235	1	2	3	4	1	1	3	2	3	5	3	3	2	1	3
320805335	RM	M	233	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
321646714	RM	M	235	3	5	3	3	3	5	3	3	3	3	3	3	3	3	3
322680935	RM	F	234	1	2	2	3	5	5	1	3	3	3	5	3	3	5	4
328685245	AO	M	233	4	4	4	4	4	4	4	3	3	4	4	4	4	4	3

Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35
5	5	5	2	3	5	3	4	3	4	5	1	5	3	3	5	1	1	1	1
4	3	4	3	2	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	5	1	2	5	5	1	5	5	5	1	1	5	1	3	5	2	1	5	1
3	4	1	1	4	5	2	4	2	4	4	1	4	1	3	4	2	1	4	2
3	3	2	3	2	5	2	3	3	3	3	1	3	1	3	2	1	1	3	1
2	3	2	3	3	2	4	3	2	4	3	1	4	2	3	3	3	3	3	5
5	5	5	3	3	1	1	3	4	5	3	1	5	1	2	4	1	1	5	1
2	2	2	3	0	2	2	1	2	2	1	4	2	5	4	2	2	5	1	4
3	5	0	4	3	5	5	3	3	3	1	3	3	4	0	3	4	1	3	4
1	3	5	1	4	5	4	2	5	5	1	1	2	1	4	2	1	1	1	2
4	4	1	1	4	3	4	3	5	5	2	2	3	4	3	3	3	3	0	2
5	4	5	2	4	5	3	0	5	3	1	2	3	1	3	4	3	1	1	4
3	3	3	2	2	3	3	3	3	3	2	4	3	2	2	3	2	2	3	1
1	1	5	1	5	5	5	1	1	5	1	1	1	1	5	5	1	1	5	1
4	4	4	3	4	5	3	4	4	4	4	4	4	4	3	2	3	1	4	1
5	5	4	2	3	5	3	5	3	5	2	1	5	1	5	4	1	1	4	1
3	4	2	2	3	3	3	2	3	2	3	1	4	1	3	3	2	1	4	1
3	3	1	1	3	5	3	3	1	5	1	1	3	1	1	3	1	1	1	1
4	1	4	4	0	4	1	4	4	3	0	4	4	4	3	3	1	1	3	2
4	4	3	3	2	5	1	5	2	4	3	1	4	1	3	4	2	1	3	2
5	5	1	2	5	5	1	5	5	5	4	1	5	1	5	5	1	1	5	1
2	5	4	1	4	2	4	3	2	2	4	5	2	3	4	1	3	1	2	2
4	4	1	2	2	4	4	4	2	4	2	2	4	1	1	1	1	1	3	1
4	4	3	3	3	4	3	4	4	2	2	4	3	5	4	2	3	4	1	5
4	4	2	5	5	3	4	5	3	3	4	1	5	1	3	4	3	3	4	4
3	4	4	3	3	5	4	3	0	5	3	2	3	1	3	4	1	1	3	1
3	3	3	1	3	5	3	3	3	3	1	1	3	1	4	4	3	1	4	2
4	5	3	3	3	4	3	4	3	5	4	1	4	1	4	4	1	1	5	1
1	1	2	2	2	5	2	4	0	1	0	0	0	0	0	0	0	0	0	0
3	3	3	2	3	3	3	3	3	3	3	3	3	1	2	4	1	4	1	5
3	3	3	1	3	5	3	3	4	3	2	2	3	4	4	3	5	3	2	1
4	3	1	1	3	5	1	3	5	5	5	1	5	1	4	2	1	1	5	1
3	2	1	1	3	4	3	3	3	3	4	2	3	4	3	2	3	2	1	2
3	4	4	3	3	3	4	3	3	3	5	1	3	1	1	1	1	1	3	1
3	5	3	3	3	3	3	5	4	3	4	2	3	2	3	4	2	2	3	1
3	3	3	2	3	5	4	3	3	4	4	1	3	1	1	2	1	1	2	2
4	2	2	3	3	4	3	3	3	3	3	2	3	1	3	3	1	1	3	1
3	3	1	1	3	3	2	3	2	4	2	1	3	3	5	1	2	0	3	4
4	4	3	1	5	4	3	4	1	3	1	2	3	2	3	4	1	1	4	1
3	2	2	4	3	4	3	3	2	2	2	4	3	1	3	4	1	2	3	1
4	3	4	1	3	4	1	3	1	3	2	1	4	1	4	5	3	1	4	1
1	4	1	1	2	2	2	1	1	2	0	1	2	2	1	0	1	2	2	3
3	2	4	1	3	2	2	3	3	1	3	4	1	3	4	3	4	4	1	1
3	3	3	3	3	3	3	3	3	3	3	3	3	2	1	2	1	2	2	1
3	3	3	3	3	5	3	3	3	3	3	3	1	1	2	1	1	2	2	1
3	4	2	4	4	5	2	4	2	3	2	1	3	1	3	3	2	2	4	2
4	4	4	3	2	4	3	4	4	4	3	4	3	1	4	1	2	1	5	2



Q36	Q37	Q38	Q39	Q40
4	3	3	5	5
0	0	0	0	0
5	2	1	5	5
5	2	2	4	3
3	1	1	3	3
4	2	4	3	4
5	1	1	4	5
1	4	4	2	1
3	0	0	0	4
5	1	3	2	3
3	3	3	3	2
4	1	1	3	3
4	2	2	3	3
5	1	1	5	5
5	3	3	2	1
5	1	1	4	5
4	2	2	5	4
3	1	1	1	4
2	2	2	3	3
5	2	2	4	5
5	1	3	5	5
2	1	1	4	0
4	1	3	2	3
3	2	5	3	5
4	3	4	5	5
5	1	1	4	4
5	1	2	4	5
5	1	1	5	5
0	0	0	0	0
5	1	2	2	3
4	2	1	4	5
4	1	2	3	3
4	2	2	1	5
3	1	1	4	4
4	2	4	2	3
4	2	3	2	3
5	1	2	4	5
5	3	2	2	5
5	1	2	5	5
5	1	1	3	4
5	1	1	5	5
2	2	1	1	2
2	3	3	2	2
1	1	3	2	1
1	1	1	1	1
5	2	4	2	4
4	1	2	4	4

SSN	Prog	Gender	Div	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
330681212	C	M	233	4	4	4	4	3	5	4	4	1	3	2	4	3	5	4
330724123	RM	M	233	1	2	1	1	4	5	1	1	0	2	2	1	1	1	1
332727126	RM	M	235	3	4	3	3	3	4	5	3	3	2	3	3	4	4	4
335621921	AO	M	237	2	3	3	1	1	1	1	3	2	2	3	2	3	2	2
351665179	AO	M	235	4	4	3	2	4	5	3	3	4	2	3	3	4	4	3
352766571	AO	M	237	4	2	3	3	4	5	3	4	1	2	4	4	5	5	1
353762840	AO	M	237	4	4	0	2	2	5	4	0	4	2	5	0	4	5	4
354685620	AO	M	235	3	3	3	3	5	5	4	3	4	2	5	4	4	4	2
355688151	C	M	235	4	4	2	2	5	5	3	4	4	2	5	4	2	5	4
360669734	AO	M	233	2	4	4	3	5	5	2	4	3	2	5	4	4	5	2
360747390	RM	F	234	2	4	3	3	4	5	2	3	3	3	4	3	3	4	3
361745659	C	M	233	2	1	3	2	5	5	2	3	2	3	5	2	3	4	2
362888195	RM	M	238	2	2	4	4	5	5	2	4	3	5	5	5	4	5	5
363065998	AO	M	235	3	4	2	2	5	5	4	4	3	3	5	3	3	5	3
363820374	AO	F	234	2	3	4	5	4	3	2	3	2	2	4	2	3	4	2
363925421	C	M	233	5	2	4	4	4	4	4	4	4	4	1	4	4	4	4
371022442	AO	F	234	1	3	3	3	4	5	1	3	4	1	4	2	2	5	1
374885896	RM	M	238	2	3	3	2	3	4	3	3	3	3	0	4	3	4	3
396869815	RM	M	233	2	2	4	4	4	5	1	3	2	4	4	4	4	4	2
399663249	AO	F	234	4	4	5	4	4	5	4	4	3	4	5	4	4	5	3
401176347	AO	M	238	3	4	3	5	2	4	4	4	5	3	5	4	4	5	3
411412271	AO	M	237	3	4	3	4	4	5	2	4	2	2	5	4	4	5	2
414314654	C	M	238	4	4	5	4	3	5	3	4	3	4	3	4	5	5	4
418156086	RM	M	238	2	3	3	4	3	4	3	3	3	3	4	3	3	4	4
420233024	RM	M	238	4	1	4	3	2	4	4	3	3	4	4	3	2	3	4
420983860	C	F	236	1	1	2	1	5	4	1	3	5	4	4	2	3	4	4
422271001	C	M	238	2	3	2	2	1	1	2	3	2	1	1	3	1	1	3
423131466	AO	M	235	3	3	3	2	3	5	3	3	3	3	4	3	3	4	3
425511051	RM	F	236	1	5	1	1	5	5	1	1	4	1	4	4	1	5	5
429671807	C	M	233	1	2	3	4	4	4	2	3	4	3	5	3	3	5	4
431350965	C	F	236	1	3	3	3	3	4	3	3	3	3	4	3	3	3	3
432619135	C	F	236	2	3	3	2	5	4	3	3	3	2	4	4	3	4	3
433730373	AO	F	236	2	2	2	4	2	5	2	3	2	2	5	2	3	5	2
433733185	RM	M	233	1	4	3	2	4	5	2	4	3	2	4	3	3	4	2
434596439	RM	M	235	1	4	3	2	5	5	5	3	3	1	5	5	5	5	3
434656760	RM	M	235	2	4	1	4	4	4	4	4	4	4	4	4	4	4	2
434698831	AO	M	233	2	4	4	5	5	5	3	4	2	2	4	3	3	4	3
435531753	RM	M	237	3	4	3	3	3	3	3	3	3	3	3	4	3	2	3
437211754	AO	M	233	1	0	2	2	5	5	2	4	2	2	5	2	2	4	4
437357405	RM	M	238	5	3	3	3	4	3	3	3	3	3	3	3	3	3	3
438335318	C	F	234	1	1	4	5	5	5	1	1	1	1	1	1	1	5	1
438435862	AO	M	233	2	2	4	2	2	5	2	1	1	2	4	3	3	1	3
438553157	C	M	238	2	3	3	5	5	5	3	3	3	3	5	3	3	5	3
438557878	AO	M	237	3	2	1	3	4	4	2	1	4	3	4	4	5	4	1
440929027	RM	M	235	3	3	3	3	4	5	4	5	5	3	5	3	4	5	2
442743716	RM	M	237	4	3	2	3	5	1	3	2	2	5	2	1	1	1	5
443940347	RM	M	237	2	4	4	2	5	5	2	2	4	2	4	2	4	5	3

Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35
4	3	1	3	3	4	1	3	5	5	3	1	0	4	2	2	5	1	0	4
1	5	4	4	1	5	1	3	3	3	3	2	3	1	3	2	2	1	4	2
3	2	4	3	4	4	3	3	3	3	3	3	3	3	3	2	3	3	2	3
1	2	3	4	4	4	3	4	3	2	3	3	4	3	4	4	2	4	2	0
4	3	2	2	4	4	3	2	3	1	2	2	3	3	2	4	2	1	2	3
4	5	2	2	4	4	2	4	3	4	2	1	4	3	2	3	2	3	3	2
3	4	3	5	4	5	4	4	4	5	4	2	3	3	4	4	3	1	3	3
4	4	4	1	4	5	2	4	2	4	2	1	4	3	2	4	2	3	4	2
4	4	2	1	4	5	2	4	2	5	2	2	4	2	3	5	2	2	4	2
3	4	4	1	4	5	4	3	3	2	2	1	3	2	4	3	2	2	4	2
3	3	3	2	3	4	4	3	3	3	2	3	3	0	0	0	0	0	0	0
3	4	3	2	3	4	3	3	4	4	5	3	3	1	5	3	1	1	4	1
4	5	1	5	4	5	4	4	4	5	4	1	4	1	1	3	1	1	4	1
3	4	3	3	3	5	3	3	3	5	4	1	3	1	3	1	1	1	2	3
4	4	4	2	2	2	4	4	2	4	4	2	4	2	3	4	2	1	3	2
4	4	4	1	4	4	4	4	4	4	4	2	4	3	5	4	2	2	2	2
2	4	2	1	4	4	4	2	2	2	1	1	2	2	3	3	3	1	1	1
3	3	3	2	3	4	3	3	3	3	3	3	3	1	1	2	2	1	3	2
4	4	3	2	4	5	2	4	4	4	2	1	4	1	4	2	2	2	3	2
4	4	1	2	4	5	2	4	4	4	4	1	4	1	1	4	2	1	4	1
4	3	2	1	4	5	3	4	3	4	2	1	4	2	3	4	3	3	4	1
2	4	2	2	4	4	4	2	2	4	2	2	4	2	3	2	2	2	3	2
5	4	4	1	3	4	4	4	4	4	3	2	3	2	4	4	2	2	3	3
3	3	1	2	3	5	3	3	2	4	3	2	3	1	1	4	2	1	3	1
1	4	3	3	4	4	4	2	3	3	4	3	0	1	1	4	2	3	3	1
4	2	4	1	5	3	3	1	1	1	1	3	1	1	0	4	5	2	1	1
4	1	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
3	3	1	2	3	4	2	3	3	3	2	2	3	3	3	3	3	3	3	3
1	2	4	2	5	5	4	4	1	1	5	2	2	0	0	0	0	0	0	0
3	3	2	4	3	3	2	3	2	5	1	2	3	4	2	3	2	3	2	2
3	3	3	3	3	4	3	3	3	3	4	2	3	1	1	3	1	1	3	1
4	2	4	2	3	4	4	4	4	4	2	2	3	2	1	5	1	1	3	2
3	4	1	2	3	5	1	4	4	2	5	2	3	1	1	4	1	1	4	2
4	4	4	2	3	4	3	4	3	4	2	1	4	1	4	5	2	1	3	1
5	3	3	3	3	5	2	5	3	5	1	5	4	1	2	1	1	1	2	2
2	4	2	2	3	4	2	4	2	4	2	2	4	2	4	2	2	2	4	2
3	3	3	2	3	4	3	3	4	2	3	3	3	0	0	0	0	0	0	0
4	0	2	3	2	2	2	4	3	3	2	3	4	1	1	1	1	1	3	1
2	3	4	4	5	1	4	3	3	1	4	1	2	3	2	1	3	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	1	3	2	3	3	2	3
1	1	1	1	1	4	2	2	1	1	1	1	2	2	1	3	2	1	4	1
2	3	2	1	3	5	2	3	2	3	2	1	2	2	2	4	2	1	3	1
5	3	3	1	3	5	3	3	3	3	1	1	3	1	1	3	1	1	3	1
4	4	2	2	4	3	3	4	2	4	2	1	2	3	5	5	0	2	2	1
3	4	3	3	2	2	3	4	2	2	2	2	3	3	3	3	3	3	3	3
2	5	0	1	2	4	2	3	5	4	4	1	4	1	4	5	1	1	4	1
3	4	2	2	4	4	4	4	2	1	2	3	1	1	4	4	3	3	2	1

Q36	Q37	Q38	Q39	Q40
3	3	3	3	3
3	1	4	3	3
4	3	3	2	4
4	3	1	3	3
3	3	3	3	3
1	3	3	3	3
4	3	2	3	4
4	2	4	4	4
5	2	2	5	5
4	2	3	4	4
0	0	0	0	0
5	1	1	5	5
4	2	2	5	4
5	1	3	1	4
4	2	1	4	4
2	2	2	3	5
4	3	3	4	3
4	1	3	2	2
4	2	3	2	3
4	1	2	5	5
5	1	1	4	3
2	2	2	2	2
4	3	3	5	0
5	1	1	4	5
3	1	0	0	0
0	5	1	2	5
3	3	3	3	3
1	4	1	3	5
0	0	0	0	0
3	4	1	3	3
3	1	1	3	3
5	1	2	5	5
4	1	1	4	5
4	1	2	5	4
5	2	1	3	5
5	2	5	2	4
0	0	0	0	0
1	1	1	1	1
1	2	3	1	1
2	4	4	3	4
5	1	1	3	3
5	2	2	4	3
5	1	1	3	5
5	2	4	4	5
3	3	3	3	3
5	1	1	5	5
2	4	2	2	5

SSN	Progr	Gender	Div	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
444887828	RM	M	238	2	3	4	3	5	5	3	2	3	3	3	3	3	4	3
445840185	RM	M	235	2	4	3	2	3	5	4	3	3	3	5	3	3	5	5
447745299	C	M	233	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
447929634	C	M	235	3	1	3	3	5	5	3	3	3	3	5	3	3	5	3
449775825	RM	M	238	2	3	3	2	2	5	2	4	4	3	4	5	3	5	5
449972440	C	M	235	4	5	3	3	5	5	1	4	3	5	5	4	4	5	10
450957390	C	M	233	2	2	3	4	4	3	1	3	3	1	3	3	3	3	3
452634332	C	M	233	2	4	4	3	5	4	1	3	4	2	5	4	4	4	4
452695478	AO	M	237	2	1	4	2	4	4	2	3	4	2	2	4	4	5	4
454834818	C	M	238	3	5	1	2	4	4	0	0	4	2	5	0	3	4	4
454937900	C	M	238	2	2	3	3	4	5	2	3	3	3	4	5	3	5	3
455878195	C	M	235	1	3	3	3	3	5	1	3	2	2	4	3	3	4	3
457613198	RM	M	237	2	4	2	4	4	4	2	2	4	3	4	5	4	4	4
457657206	AO	M	233	5	0	3	0	3	4	4	3	3	2	5	4	3	5	2
458854617	AO	M	235	3	4	0	3	5	5	3	3	3	3	5	5	4	5	3
463796866	RM	M	233	2	3	1	1	5	5	1	3	1	2	5	1	2	4	2
464414791	RM	F	236	3	3	3	4	3	4	3	3	3	2	2	3	3	1	3
464475757	C	F	234	2	5	2	2	5	5	2	3	4	3	5	4	4	5	5
464914268	AO	M	235	1	4	3	2	5	5	1	3	3	2	5	3	3	5	2
466777265	RM	M	237	4	4	4	0	4	4	0	4	4	2	4	5	5	4	4
467416882	AO	M	237	3	3	4	2	4	4	2	5	2	2	4	4	4	4	3
467516569	C	M	235	3	4	4	4	3	5	3	3	3	4	5	4	3	5	2
474155312	RM	M	237	4	4	2	4	4	5	4	3	4	3	2	2	3	4	3
474963732	C	F	234	1	1	1	2	4	5	2	4	3	4	1	1	3	1	2
476029798	C	M	237	4	4	3	3	3	5	3	2	3	2	5	2	2	5	3
476297826	C	M	235	2	2	3	3	4	4	2	3	3	3	3	3	3	4	3
482029134	RM	F	234	2	4	5	5	5	4	4	2	4	4	5	5	5	5	4
483903771	AO	M	233	1	1	1	1	4	4	1	1	1	1	4	1	1	5	1
484084146	AO	F	234	2	3	3	3	4	4	1	3	3	3	4	3	3	4	3
487946653	C	M	233	2	2	4	2	4	4	2	2	2	3	4	3	4	4	2
495867580	RM	M	238	2	2	3	3	5	3	3	3	4	3	4	3	3	4	3
506139016	RM	M	237	4	4	5	3	5	5	4	5	3	3	4	5	5	5	3
508984677	C	F	236	3	0	4	3	0	4	2	0	3	1	5	4	3	5	2
512948854	AO	M	238	4	3	4	4	4	5	3	3	4	2	5	0	4	5	3
515766180	RM	M	233	1	3	3	3	5	4	2	3	3	2	4	3	3	4	3
517119820	RM	M	233	4	3	4	3	5	5	4	3	4	4	4	3	3	4	2
517760145	AO	F	236	2	4	2	3	4	0	4	3	4	3	4	2	3	4	4
517762376	AO	M	235	3	2	3	3	5	5	5	3	3	3	5	3	3	5	3
517863523	RM	M	233	4	1	2	2	2	4	4	5	2	3	2	3	4	5	4
519086140	C	F	234	4	4	2	2	5	5	2	2	2	4	5	2	2	5	2
520889977	RM	M	233	1	2	4	2	5	4	3	2	3	2	4	3	4	5	4
520901080	C	M	237	1	2	5	1	5	1	3	4	0	1	5	4	3	4	3
520988077	C	F	236	2	3	0	4	2	5	4	3	2	4	4	4	4	4	1
524470521	AO	M	237	1	1	1	1	5	1	2	1	1	1	3	3	3	3	3
525677055	C	M	233	1	2	4	4	4	5	1	2	2	2	5	4	4	4	4
525696126	RM	F	236	1	1	3	3	5	5	3	3	3	3	5	3	3	5	3
526810212	C	M	237	5	3	4	5	5	4	3	0	4	3	4	4	5	5	5

Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35
4	4	3	2	3	3	2	3	4	3	4	2	3	1	1	1	1	1	3	1
3	3	3	1	3	5	3	3	3	5	5	1	3	1	1	3	3	3	3	0
2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	1	2	3	5	2
3	3	1	1	3	5	3	3	3	5	4	1	3	2	3	4	2	1	2	1
2	2	2	2	2	3	2	4	1	4	4	2	4	3	0	2	0	1	0	2
4	4	4	1	3	4	1	5	2	5	2	1	4	1	5	3	2	1	5	1
1	3	2	1	3	3	3	2	1	1	2	3	3	2	2	3	2	2	3	2
4	3	5	4	3	5	3	3	2	3	4	1	4	5	3	1	4	3	3	3
4	4	4	1	4	4	4	4	2	4	1	2	4	4	3	2	2	3	3	2
3	3	4	2	5	4	3	2	3	2	4	3	3	2	2	2	1	3	3	1
3	3	3	2	3	1	3	3	2	3	2	1	3	3	3	3	2	1	3	2
3	3	3	1	3	3	2	3	3	1	1	4	3	1	2	3	4	1	3	3
3	4	3	2	4	2	3	3	3	3	3	3	3	3	2	3	2	1	2	1
3	3	1	2	5	4	3	3	3	2	5	1	3	1	4	4	2	2	3	4
4	3	2	3	4	5	3	3	3	3	3	2	4	1	1	5	1	1	4	1
2	2	1	1	4	5	2	2	2	1	1	1	1	3	5	1	1	4	1	5
3	3	3	3	1	1	3	3	3	3	3	3	3	3	3	2	1	1	3	0
4	4	2	2	4	5	2	2	4	4	2	1	4	2	2	4	1	2	4	2
3	2	2	4	3	4	3	3	2	2	5	1	3	1	4	3	2	1	2	1
4	3	3	3	3	4	3	4	2	4	2	1	4	2	4	4	0	4	5	4
4	3	4	2	4	3	4	4	2	4	2	2	4	1	3	3	3	1	3	1
3	3	2	1	3	5	2	3	2	3	3	1	3	1	3	4	3	3	4	1
4	5	2	2	4	4	3	4	2	2	3	2	3	2	2	4	1	2	4	3
2	2	2	2	1	1	3	2	4	2	3	1	0	3	2	4	3	0	2	4
3	3	2	1	4	3	2	2	1	4	4	2	2	2	3	3	1	1	2	1
4	4	3	3	3	4	3	3	1	3	1	2	3	1	4	4	2	1	3	1
0	4	4	4	4	5	2	4	4	4	2	4	1	2	2	5	2	2	4	2
1	1	1	1	1	5	1	1	1	1	5	1	1	1	3	4	2	2	4	2
3	4	3	2	3	4	3	3	3	3	2	1	3	1	1	4	1	1	4	1
4	4	4	2	2	4	3	4	4	4	2	2	3	1	1	1	1	1	1	1
3	4	3	2	3	4	3	3	3	3	2	1	3	0	0	0	0	0	0	0
3	3	4	4	3	5	3	3	5	5	4	1	3	1	3	3	2	1	3	3
3	5	0	4	1	4	5	3	1	2	5	1	3	2	3	4	3	2	3	1
3	3	3	2	3	5	3	4	3	4	3	2	3	2	1	2	1	1	1	1
3	3	4	2	3	4	3	3	3	4	2	1	3	1	1	3	2	2	4	2
4	4	1	2	3	5	1	4	4	4	3	1	4	3	4	3	2	2	2	1
3	4	4	3	4	4	3	4	4	3	3	1	5	3	3	4	4	2	3	0
3	3	2	1	3	5	3	3	3	3	4	1	3	1	5	3	1	1	4	1
4	4	4	1	3	5	2	1	5	4	4	1	3	1	4	3	2	3	1	4
2	5	1	2	2	4	2	2	1	0	5	1	0	2	2	3	1	1	4	2
3	4	1	1	5	4	4	3	2	3	3	4	3	3	3	3	3	3	3	3
4	3	3	4	3	4	3	3	1	3	3	1	3	4	2	1	2	4	1	4
2	3	1	1	2	4	4	4	2	5	3	1	5	2	5	4	1	1	5	2
3	2	3	2	1	2	2	3	1	3	3	3	3	2	3	4	3	2	2	1
2	4	5	4	4	5	2	4	4	2	4	3	4	1	3	1	4	2	2	2
3	5	3	3	3	5	3	3	3	4	5	2	3	1	2	4	1	1	4	1
0	4	4	4	4	4	1	5	3	5	5	5	0	0	0	0	0	0	0	0

Q36	Q37	Q38	Q39	Q40
3	1	1	3	4
1	1	1	5	5
2	1	5	3	2
5	1	1	3	4
2	3	1	3	0
5	1	1	3	5
4	2	2	3	5
4	5	2	1	4
4	4	3	3	3
4	2	2	4	2
5	3	0	3	0
3	1	5	2	2
4	3	4	3	3
4	3	5	4	4
5	1	4	5	5
1	1	4	5	0
2	3	3	3	2
5	2	2	5	5
3	1	1	3	3
4	3	3	4	3
2	1	1	3	3
5	1	3	4	5
3	2	3	3	4
2	0	4	4	4
4	1	2	3	1
4	1	1	5	5
5	2	2	5	5
4	2	1	4	4
3	1	1	5	4
4	1	1	1	1
0	0	0	0	0
5	1	2	3	4
3	1	1	4	3
3	2	1	3	2
4	2	1	3	3
3	3	3	3	3
1	4	2	4	4
5	1	3	3	5
2	1	2	3	4
4	2	2	4	4
3	4	4	4	4
1	3	3	1	1
5	2	2	4	5
4	3	5	4	4
5	2	4	2	1
3	1	1	4	3
0	0	0	0	0

SSN	Prog	Gender	Div	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
527933369	IC	M	233	1	3	3	3	3	5	1	3	3	3	3	3	3	4	3
528539383	AO	M	238	2	2	4	4	4	5	1	3	2	2	4	3	4	4	4
529536789	RM	F	236	1	4	3	4	5	5	2	3	2	3	5	5	5	5	1
530236755	IC	M	235	4	4	2	2	4	5	3	2	4	3	3	5	3	5	3
530936406	RM	M	237	4	5	4	5	5	5	5	4	4	4	5	5	5	5	3
530965411	IC	M	233	4	3	4	3	4	4	4	4	3	4	4	4	4	4	4
531111250	RM	M	235	4	4	4	4	4	4	4	3	1	5	5	4	3	4	4
533822382	IC	F	236	3	2	3	3	4	4	3	4	2	3	4	3	3	4	2
533964715	IC	M	238	1	5	5	1	5	5	1	5	1	1	5	5	5	5	1
535060532	C	F	236	3	3	3	3	4	1	3	3	3	3	4	3	3	4	3
538312181	RM	M	238	3	4	3	3	5	5	3	3	3	3	5	3	3	5	3
538967932	C	M	237	3	3	3	3	5	5	3	3	4	3	5	2	3	5	3
540253293	RM	M	237	2	0	3	3	4	4	3	3	3	3	4	3	3	4	4
540338365	RM	F	234	2	4	3	2	5	4	2	3	3	2	4	2	4	4	3
540928468	C	M	233	3	4	2	3	5	5	1	3	4	2	4	3	4	4	3
542026971	RM	F	236	1	2	3	3	4	4	2	2	4	2	4	2	5	4	4
542116556	AO	F	234	3	4	3	4	4	5	4	3	3	4	4	4	4	4	3
542250929	AO	F	236	2	1	3	3	4	5	3	4	1	3	5	4	4	5	2
542963225	C	M	238	2	4	1	3	3	2	3	4	3	3	1	1	1	1	2
543024941	RM	F	236	3	3	3	3	3	2	3	3	3	3	3	3	3	4	4
543176102	RM	M	233	5	4	3	3	3	5	1	3	3	3	3	3	3	3	3
543257262	C	M	233	2	4	3	2	5	5	4	3	4	2	5	3	4	4	4
544219405	AO	F	236	2	4	4	2	4	4	2	0	3	3	2	5	3	4	3
545578423	AO	M	233	3	2	4	2	5	5	5	3	3	2	5	3	4	4	2
548530082	RM	M	238	3	4	3	3	4	4	3	3	4	2	5	3	3	5	3
551474418	AO	M	238	2	4	4	4	4	4	4	4	4	1	5	1	1	4	2
551692710	RM	M	238	2	2	4	2	1	2	0	0	2	2	2	2	2	1	0
553794902	RM	M	233	2	1	5	5	4	5	5	5	2	2	5	5	2	5	2
554554507	RM	F	234	1	3	3	3	5	3	3	3	3	3	4	3	3	4	3
554691845	C	M	238	1	4	3	2	3	5	2	4	3	1	4	3	3	4	3
558992533	C	F	236	2	3	3	4	5	5	4	3	3	4	5	3	3	5	1
559590848	AO	M	235	3	3	3	3	3	4	3	3	3	3	3	3	3	3	3
559657568	C	M	235	2	0	3	3	4	5	4	3	3	3	5	3	3	5	3
563537061	AO	M	237	2	3	3	4	4	5	3	1	4	4	4	4	4	2	2
564935426	C	M	238	3	5	3	3	3	5	3	3	3	3	5	5	5	5	3
566596933	C	M	235	2	4	3	2	4	5	1	3	3	3	3	3	3	5	3
566696912	AO	M	235	2	2	3	2	4	5	1	4	2	3	3	4	3	5	3
566799763	RM	M	237	2	4	1	1	4	4	1	5	4	1	4	2	4	4	2
569592790	RM	M	235	3	4	0	4	4	5	4	3	3	3	4	3	4	4	0
571476142	AO	M	235	4	2	4	2	4	4	4	1	4	4	4	4	4	4	4
572613258	AO	M	233	2	4	4	5	4	5	3	3	4	3	5	5	3	4	1
573978737	RM	M	235	5	1	3	3	1	1	5	3	5	3	1	3	3	3	3
574862977	AO	M	235	3	4	3	2	5	5	3	3	3	1	0	2	3	3	2
575396164	AO	M	238	5	4	5	4	4	4	4	3	3	2	2	3	3	4	3
575821013	C	M	233	1	1	1	1	1	5	1	1	1	1	5	1	1	5	1
576672514	RM	M	233	4	2	4	5	4	4	2	2	4	4	4	4	4	3	3
579827691	AO	M	238	3	2	4	3	1	2	4	3	4	4	3	3	2	2	5



Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35
3	4	3	3	4	3	3	3	3	1	3	4	3	1	2	3	1	1	4	1
4	4	3	2	4	4	3	4	3	4	3	2	3	4	1	2	4	2	3	4
3	5	4	2	3	5	3	5	2	5	2	2	5	2	4	4	2	1	5	2
2	3	2	2	4	4	2	3	3	2	3	2	3	5	4	2	4	5	1	5
5	5	4	3	3	4	2	5	2	5	3	1	5	1	3	5	1	1	3	1
4	3	2	4	4	5	2	4	4	4	2	2	3	3	4	3	2	2	4	1
3	4	4	2	2	4	2	4	4	3	4	2	3	1	2	3	1	1	4	1
2	2	2	2	3	5	3	3	3	4	3	1	1	2	5	5	3	3	4	5
1	5	5	1	5	5	1	5	5	5	5	1	5	2	3	3	1	2	4	1
4	3	3	3	2	4	2	3	3	4	3	3	3	4	2	1	3	4	2	3
3	5	0	3	3	3	3	3	1	3	5	1	0	3	4	3	1	1	4	1
3	3	1	1	2	0	3	3	3	5	1	1	3	2	3	2	4	4	4	4
4	4	4	2	3	3	3	4	3	3	4	2	3	1	3	3	1	1	3	1
4	4	3	2	4	4	4	2	2	2	2	3	4	2	3	3	2	2	2	3
3	3	4	2	4	2	3	4	4	3	2	1	3	3	3	2	4	3	3	2
1	4	2	1	4	5	4	4	2	3	2	2	2	2	1	2	2	2	3	2
4	5	3	3	3	5	2	3	2	2	2	3	4	1	1	4	1	1	5	1
3	3	1	1	3	2	0	5	5	4	1	1	4	2	4	4	1	1	3	1
2	1	3	3	3	2	3	2	3	2	2	3	2	2	0	3	2	3	2	2
4	3	3	3	3	3	3	3	3	3	3	3	3	1	3	4	1	1	4	1
3	3	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	5
3	5	4	2	4	5	5	3	2	2	4	2	3	1	2	3	2	3	4	1
3	4	2	2	4	4	3	4	2	2	3	2	3	2	3	2	2	3	2	1
3	3	2	2	4	1	3	4	2	3	4	2	3	3	3	2	2	2	1	2
3	3	3	2	4	4	3	3	4	4	1	3	3	3	3	3	3	3	3	3
2	4	1	2	5	3	4	1	1	1	1	2	2	1	1	1	1	1	1	1
3	1	2	1	4	3	3	2	1	2	3	2	3	2	2	2	2	2	2	2
4	4	2	2	2	5	2	4	5	5	4	1	4	1	5	5	1	1	5	1
3	3	2	1	3	5	3	3	3	4	2	1	3	2	2	3	5	1	3	
3	3	2	2	4	4	2	3	3	4	2	1	3	1	2	3	2	1	3	1
3	2	3	3	2	5	3	4	2	4	2	2	3	1	2	5	1	1	3	1
3	3	3	2	3	3	3	3	3	4	3	2	3	1	1	4	2	1	2	2
3	3	3	2	3	5	3	3	3	5	3	1	3	2	3	4	1	2	3	2
4	4	3	4	3	4	3	3	4	4	2	1	4	1	3	4	2	1	4	2
3	4	4	1	3	5	3	5	3	5	5	2	5	1	2	3	2	1	2	1
3	1	3	3	3	3	3	3	1	2	2	2	3	1	3	3	3	1	3	4
3	3	3	2	3	2	3	3	3	3	4	3	3	1	2	1	1	4	2	1
3	5	2	2	4	4	4	2	4	3	2	4	3	1	3	4	1	1	2	1
3	4	2	1	3	3	2	5	3	5	4	1	4	2	1	3	1	1	5	2
3	2	4	2	4	4	2	2	2	4	4	2	4	1	2	4	2	1	3	1
3	4	4	1	3	4	4	4	4	4	3	3	4	1	2	3	0	1	2	1
3	1	5	5	3	1	1	3	3	1	5	5	3	1	1	3	1	1	2	3
3	3	3	3	3	4	3	3	4	2	3	5	3	3	3	2	3	2	3	2
4	3	2	2	3	4	3	3	3	3	2	2	3	2	2	4	3	3	2	4
1	1	1	5	1	5	1	1	1	1	5	1	1	3	3	3	3	3	3	3
5	4	4	2	2	1	3	4	2	1	2	3	4	2	3	4	4	4	3	3
3	4	4	2	4	3	3	0	0	3	2	4	5	3	4	2	4	3	3	4

Q36	Q37	Q38	Q39	Q40
4	2	1	2	3
5	3	4	2	1
4	2	2	4	5
4	4	5	2	2
4	1	1	5	4
3	2	2	4	4
4	1	1	4	4
4	3	3	2	4
3	2	1	2	3
2	5	3	2	2
5	1	1	5	5
4	4	4	3	2
3	1	1	3	3
3	2	2	2	0
4	2	4	2	2
2	2	1	3	3
5	1	2	5	5
5	2	1	3	4
3	0	0	0	0
5	1	1	4	5
3	5	0	0	0
5	3	2	3	3
2	2	4	4	0
2	3	4	2	4
3	3	3	3	3
1	1	1	1	1
2	2	2	2	2
5	1	1	5	5
3	4	2	3	3
4	2	1	3	4
4	1	1	5	5
4	2	3	3	4
4	2	2	4	3
3	2	1	5	4
5	1	1	3	3
4	1	4	5	3
1	1	2	2	2
5	1	2	3	2
5	1	1	4	3
1	1	1	2	4
4	1	4	1	4
2	4	4	3	0
2	4	0	3	3
1	3	2	3	0
3	3	3	3	3
3	3	4	4	2
2	3	4	3	5

SSN	Prog	Gender	Div	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
585296217	C	M	235	2	4	0	3	5	1	4	4	4	2	3	4	5	5	4
589786914	AO	M	238	3	3	3	4	4	5	4	3	4	3	4	5	3	4	3
591509963	RM	M	235	2	1	0	1	3	5	2	0	5	4	3	3	3	5	1
591668346	AO	F	236	1	4	3	2	5	5	5	3	3	2	4	3	3	4	3
595907581	AO	F	236	2	3	4	2	5	3	2	3	4	3	4	5	3	4	3
601645120	RM	M	233	1	2	0	3	4	4	2	2	2	3	3	3	3	3	3
602886386	AO	M	233	1	2	4	5	5	5	3	5	1	3	5	5	5	4	3
602887400	AO	M	238	4	5	4	4	4	4	4	4	4	3	4	4	4	4	3
603050323	AO	M	233	3	5	5	3	1	5	5	5	3	1	5	1	4	3	4
604387047	C	M	237	0	0	4	5	4	0	2	3	2	3	4	5	4	5	3
606054477	C	M	237	2	3	3	3	4	5	2	3	3	3	4	2	2	5	3
606566424	AO	M	235	4	5	3	2	5	5	4	2	4	3	4	5	3	3	4
606980444	C	M	237	4	4	5	5	4	5	4	3	2	4	5	5	5	5	2
607014689	AO	M	237	3	4	5	5	4	5	3	3	5	3	4	3	3	5	4
609721269	AO	F	234	2	4	5	3	5	5	3	5	3	3	4	3	4	5	2
610026164	AO	M	238	2	1	5	4	5	5	5	5	4	2	5	5	5	4	1
610100041	C	F	234	3	4	4	3	5	5	3	3	1	3	4	4	3	5	2
611053196	RM	M	238	2	4	2	2	4	4	3	4	3	2	4	4	4	4	3
613604179	RM	F	236	1	1	1	1	4	5	2	4	1	1	5	2	2	5	2
613741803	RM	M	237	3	4	4	3	4	5	4	4	4	4	5	5	3	5	5
614070751	C	F	234	3	3	4	3	4	5	2	3	3	3	4	3	3	3	3
614808064	C	M	238	4	4	4	5	3	5	4	4	3	4	4	5	4	5	4
615050908	C	M	233	2	3	3	3	4	5	2	3	3	3	4	3	3	4	3
615188707	RM	M	238	2	3	4	4	4	4	4	3	3	3	5	3	3	5	3
615427249	AO	M	238	1	2	3	3	4	4	2	2	3	3	4	4	4	4	3
616961147	RM	F	236	4	2	3	3	5	5	3	3	2	4	4	4	4	3	4
617568991	AO	M	238	4	5	2	1	5	5	4	3	4	4	5	4	4	4	2
619249850	C	F	234	2	3	3	3	4	5	1	3	4	3	2	3	3	2	3
620020982	RM	M	235	4	2	5	4	4	4	5	4	4	2	5	4	2	2	4
621348806	RM	F	236	3	4	3	3	5	5	5	3	1	1	5	5	3	5	1
622581907	RM	M	233	2	2	1	2	5	2	2	2	4	3	4	3	4	4	3
623829329	C	M	233	1	1	4	4	1	4	1	1	1	2	4	5	4	4	1
624056227	C	M	238	2	4	3	4	5	5	4	4	3	2	4	5	5	5	2
624981125	C	M	238	3	4	4	3	3	4	3	4	4	3	5	4	4	3	3
625721795	AO	M	233	3	4	3	4	4	4	3	3	3	3	5	3	3	4	3
635071198	C	M	238	4	2	4	4	5	5	5	5	2	4	5	5	5	5	4

Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35
4	3	5	1	4	5	1	4	5	4	3	1	4	2	4	5	2	1	4	1
3	4	2	3	3	5	2	5	3	5	3	2	4	1	0	5	1	1	5	1
3	4	1	1	2	4	2	3	4	5	2	1	3	1	4	4	1	1	5	2
4	3	3	2	4	5	3	3	2	4	4	1	3	1	3	3	1	1	4	1
4	3	3	3	3	3	3	3	3	4	3	1	4	1	4	5	3	1	1	2
3	3	3	3	3	3	3	3	3	3	3	3	3	0	3	3	3	3	3	3
3	5	2	4	4	4	4	5	5	4	5	1	3	3	4	4	1	1	4	1
3	5	3	4	4	4	4	4	4	4	4	4	4	2	0	1	1	1	0	2
3	3	4	4	2	3	4	3	3	3	3	1	3	3	1	5	3	1	3	3
5	4	1	1	3	4	3	3	1	3	4	1	3	1	1	4	1	1	3	3
3	4	2	1	3	4	3	3	3	3	2	2	3	1	3	3	3	1	4	1
3	5	4	3	3	5	2	5	3	5	5	1	3	3	3	3	3	3	3	2
5	5	1	1	3	3	1	4	3	4	5	1	5	1	2	3	2	1	4	1
0	3	0	4	3	3	4	4	3	4	3	2	3	3	1	1	1	1	3	2
3	4	2	2	4	5	3	5	3	5	5	3	3	1	1	4	2	1	4	1
1	4	2	2	4	5	4	4	3	5	3	1	1	2	5	2	1	1	3	4
3	4	2	2	4	5	3	3	3	3	3	1	3	1	4	4	1	1	3	2
3	4	2	2	4	4	4	4	3	4	4	1	3	2	3	2	2	3	3	3
2	2	4	1	4	5	2	2	1	2	2	2	2	2	3	4	2	2	4	1
4	4	2	4	4	5	4	4	3	5	5	2	5	2	2	3	3	3	2	1
3	4	3	3	3	3	3	3	3	4	3	3	3	1	3	4	4	2	4	2
4	4	5	3	3	5	5	5	3	5	4	3	5	1	4	4	4	4	5	1
3	3	3	2	3	4	3	3	3	4	2	2	3	2	2	3	2	2	3	2
3	3	2	4	3	4	3	3	4	4	3	1	3	2	3	4	2	2	3	2
3	4	3	2	3	5	3	4	3	4	4	0	0	2	3	0	2	3	3	3
4	4	4	1	4	3	0	4	3	3	2	3	4	0	3	3	3	1	3	1
5	2	4	4	5	5	4	4	3	5	5	1	4	1	4	3	4	1	4	1
2	2	1	2	3	5	4	3	2	3	2	2	3	2	3	4	3	1	3	1
5	5	1	1	4	1	1	1	1	5	5	1	4	1	2	4	2	2	1	5
5	2	0	5	1	1	3	1	1	5	1	1	1	3	3	3	3	4	4	4
3	4	2	2	4	4	2	4	4	3	5	1	4	3	2	3	2	1	3	1
4	4	5	4	4	4	5	4	5	4	4	4	4	1	1	2	5	1	4	1
4	5	3	3	3	5	0	2	0	2	0	4	0	2	1	4	3	1	4	1
4	3	4	3	4	5	3	4	4	5	3	3	3	2	3	3	2	1	3	1
3	3	1	2	4	5	3	3	5	3	2	1	3	1	5	5	1	1	4	1
5	5	4	4	4	5	4	5	1	4	2	2	4	3	4	4	4	4	5	4

Q36	Q37	Q38	Q39	Q40
4	2	1	4	5
5	1	1	5	5
4	1	2	4	5
4	1	1	4	4
4	2	3	5	5
3	3	3	3	3
4	1	1	4	4
5	2	2	2	2
0	3	4	1	1
3	3	3	3	3
4	1	2	3	4
4	1	2	4	4
4	1	1	4	5
3	1	2	2	3
3	1	1	4	2
5	4	4	3	5
5	1	2	4	5
4	3	2	4	4
0	3	2	2	0
5	4	4	3	3
4	1	2	5	4
4	1	1	4	5
3	1	3	3	2
4	2	2	4	4
4	3	3	3	3
5	2	2	4	4
5	1	1	5	4
3	2	3	1	2
1	0	5	0	0
5	4	5	3	3
5	2	3	5	-
5	1	1	2	2
4	0	1	3	4
5	1	1	3	4
5	1	2	5	5
1	0	1	2	2

SSN	Prog	Gender	Div	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14
001725988	RM	M	237	4	3	4	4	4	5	4	4	2	2	4	2	3	5
002781065	C	M	233	2	1	5	4	5	5	5	5	3	5	5	5	4	5
006963714	RM	M	235	4	4	5	4	5	5	5	2	2	4	5	3	2	5
010704280	C	M	235	4	4	5	5	4	5	5	5	4	2	5	3	4	5
027585631	RM	M	238	2	4	4	2	5	5	2	1	4	5	5	4	5	5
029641195	AO	M	233	4	5	5	4	5	5	5	3	1	2	5	5	5	5
031667507	RM	F	234	4	3	5	4	4	5	5	3	1	2	4	4	5	5
036460150	C	M	237	1	1	0	2	2	0	1	2	3	1	2	0	5	5
037527379	C	M	237	5	1	4	5	5	5	5	4	1	5	5	4	4	5
042703652	RM	M	233	3	2	4	2	5	5	4	3	2	4	5	4	4	4
052622327	C	M	235	4	1	4	4	4	5	4	4	3	4	4	4	4	5
065728767	AO	M	233	4	2	4	3	0	4	4	2	2	2	4	4	4	2
082603709	C	M	238	4	2	4	5	5	5	4	5	2	2	5	4	5	5
082646921	C	F	234	4	4	3	1	3	5	4	3	3	5	4	5	4	4
082869967	RM	M	238	4	2	4	5	5	4	4	3	1	4	5	4	4	4
088662527	C	M	233	3	5	5	4	4	4	3	2	3	3	4	2	4	4
092724434	AO	M	238	4	2	4	4	2	0	4	2	2	2	1	1	4	4
097720977	C	F	236	4	2	4	0	3	4	4	2	3	4	4	4	4	5
097745538	RM	M	237	4	2	5	2	5	5	5	1	0	2	5	5	5	5
098565025	C	F	236	2	1	5	5	5	5	5	5	1	4	4	5	5	5
102845463	AO	M	238	4	2	3	3	4	5	4	3	4	4	5	4	5	5
110600462	AO	M	235	4	1	4	2	5	5	4	5	1	4	5	5	5	4
116862352	AO	M	238	4	3	4	4	4	4	4	3	3	4	4	4	4	4
117600388	AO	M	238	5	4	5	4	4	5	5	5	4	4	5	5	5	5
124600339	AO	F	236	0	2	4	5	4	5	2	2	2	4	5	2	5	5
124724689	AO	M	238	5	3	5	4	5	5	5	3	3	4	4	5	4	5
128649038	RM	M	238	4	1	4	4	1	4	4	4	3	4	1	4	4	1
137669309	AO	M	235	2	2	2	4	4	5	4	4	1	3	1	2	2	1
137865156	AO	M	233	4	4	4	3	4	4	4	4	3	3	4	3	3	4
150642918	AO	F	234	2	2	4	2	4	3	3	3	3	3	2	3	4	4
154784818	AO	F	236	2	0	4	5	5	4	4	3	2	2	4	4	2	5
166667854	AO	F	234	5	4	4	3	4	5	5	4	2	5	4	3	4	5
173661863	RM	M	235	5	2	5	2	5	5	5	4	1	5	5	4	5	5
180608755	RM	M	237	3	2	4	4	4	5	5	4	4	3	4	4	4	4
185646161	RM	F	236	4	2	4	4	5	5	5	4	2	2	5	4	4	5
186680564	C	M	235	4	4	4	4	5	5	5	4	5	2	4	4	4	4
204547214	RM	F	236	4	2	4	2	4	5	5	5	4	4	5	4	4	5
205483391	RM	M	238	3	2	4	4	3	4	4	4	3	4	4	4	3	4
211542430	AO	M	235	3	2	4	4	4	4	4	2	2	2	4	4	4	4
216155550	C	F	234	3	0	5	4	4	4	4	3	2	4	4	4	4	4
224490960	AO	F	234	1	1	5	4	5	5	5	2	5	1	5	4	4	4
227150718	AO	F	236	4	4	4	4	4	4	3	3	5	4	4	3	4	3
227272077	RM	M	233	4	4	4	4	4	4	4	3	3	4	4	2	3	4
227319491	C	F	234	4	3	4	3	5	4	2	4	1	4	5	2	2	5
227379153	C	M	237	3	2	2	1	4	5	4	5	3	4	4	4	3	4
227418850	AO	M	233	4	4	4	3	4	4	5	3	1	2	4	4	4	4
229137935	AO	F	234	2	3	4	2	4	4	3	4	4	0	4	4	4	4

PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22	PQ23	PQ24	PQ25	PQ26	PQ27	PQ28	PQ29	PQ30	PQ31	PQ32	PQ33
2	4	4	2	4	2	5	2	4	3	4	4	1	2	1	3	3	1	1
1	5	5	1	4	1	5	1	0	4	5	5	1	5	1	4	5	1	1
4	4	3	3	1	4	5	3	3	1	4	1	1	3	4	5	5	1	3
2	3	4	5	3	3	5	2	4	1	4	4	1	3	1	3	3	1	3
4	2	3	1	2	5	5	3	4	5	4	2	1	4	1	3	2	1	1
1	4	4	3	3	4	5	3	4	5	5	5	1	5	0	0	0	0	0
2	4	4	2	2	2	5	2	4	2	4	5	1	4	1	2	2	1	1
5	4	5	4	0	3	3	4	5	4	3	3	4	0	0	5	5	5	4
1	4	4	1	1	1	5	5	4	2	4	5	1	4	1	5	3	1	1
2	4	3	4	4	2	4	3	4	4	4	5	1	4	1	2	4	2	2
1	4	2	1	1	3	1	5	4	4	4	1	1	4	0	0	0	0	0
2	4	3	2	2	2	2	2	4	2	4	2	2	4	1	3	1	2	1
2	4	4	2	2	2	4	3	4	4	4	2	2	4	3	3	3	3	2
3	0	4	4	3	3	4	2	1	1	4	4	0	2	0	1	5	2	1
1	5	0	2	3	2	4	2	5	5	5	5	5	2	1	5	4	4	3
4	3	3	2	0	3	3	4	3	4	4	3	2	4	1	2	2	3	1
4	4	4	3	1	2	4	2	4	4	4	2	2	4	1	3	4	3	3
2	4	4	3	3	3	4	3	4	2	4	3	4	4	3	2	3	2	3
5	3	5	5	4	5	5	5	5	5	5	5	5	5	1	5	5	1	0
1	5	4	2	1	1	5	2	5	5	4	1	1	0	4	5	1	1	4
1	4	4	1	2	3	5	1	5	3	5	2	1	4	1	5	5	1	3
1	5	4	1	1	2	4	2	5	4	4	1	1	5	2	5	4	2	2
3	4	4	2	4	3	4	2	4	4	4	4	2	4	2	4	4	1	1
2	5	4	2	2	3	4	1	4	2	4	4	1	4	1	2	4	3	1
3	3	4	2	3	3	3	4	3	3	4	2	2	2	2	3	2	2	3
3	4	5	3	2	3	4	3	3	4	5	3	3	5	1	1	3	2	1
4	4	1	2	2	4	1	4	4	4	2	4	1	4	2	4	4	2	2
5	0	3	1	2	2	3	5	2	1	5	3	5	4	1	4	1	5	5
2	4	3	2	2	3	5	2	4	4	4	4	2	3	1	1	1	1	1
3	3	2	4	2	3	3	3	3	3	3	2	3	2	3	1	1	3	2
2	2	4	2	1	2	2	4	2	2	2	2	1	2	1	2	3	5	1
1	5	5	1	3	1	4	1	4	2	5	4	1	2	1	3	4	1	1
1	5	4	1	1	1	5	2	5	5	2	5	1	5	1	2	3	3	2
1	5	4	2	2	1	4	2	4	2	4	5	1	5	1	1	1	1	1
1	2	4	2	2	4	4	2	2	4	4	3	1	2	1	2	4	1	3
4	5	4	5	3	3	1	3	3	3	3	1	5	4	2	2	3	2	3
2	4	4	2	4	2	5	4	4	4	5	4	2	4	1	3	3	2	1
4	4	5	4	2	2	4	3	4	4	4	4	2	4	3	3	3	3	3
2	4	3	2	2	2	4	2	4	2	3	2	2	4	1	5	3	1	1
2	4	4	4	3	2	4	3	4	4	4	3	1	4	1	2	2	2	1
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4	3	4	4	3	2	4	4	4	2	2	2	3	4	3	3	4	3	3
2	4	3	2	2	2	4	2	4	3	4	3	2	2	3	3	3	3	3
1	5	5	4	1	3	4	2	2	4	4	3	2	3	3	2	1	5	3
3	4	2	4	1	4	4	2	4	3	4	4	2	4	1	3	4	2	2
1	4	4	2	2	2	5	2	4	3	4	5	2	3	1	3	4	2	1
2	4	4	4	2	2	4	4	4	4	4	4	2	4	0	0	0	0	0

PQ34	PQ35	PQ36	PQ37	PQ38	PQ39	PQ40
3	3	4	2	2	4	4
1	4	4	1	1	4	0
2	3	5	3	3	3	1
4	2	5	3	4	3	2
5	1	4	1	1	2	2
1	0	0	0	0	0	0
4	1	3	1	1	4	4
3	2	4	5	5	5	5
5	1	5	1	1	4	5
4	2	4	2	2	4	5
0	0	0	0	0	0	0
3	1	1	1	1	2	3
4	2	5	2	3	2	4
5	1	5	1	1	5	5
5	0	5	1	1	5	5
4	1	2	1	1	4	4
4	3	4	3	3	4	4
4	3	4	2	2	3	3
1	5	5	1	5	5	5
1	4	1	1	5	5	0
4	2	5	1	1	4	5
5	3	4	3	4	0	0
3	1	4	1	1	3	4
4	2	5	2	1	3	4
2	1	1	4	3	3	1
5	3	1	2	1	3	5
4	4	3	2	5	4	4
1	5	5	0	1	1	1
3	1	2	1	1	5	5
1	2	1	2	2	2	3
4	1	5	1	2	4	5
4	1	5	1	1	4	5
3	5	5	1	3	2	5
4	1	4	0	1	1	4
1	1	5	1	1	4	2
3	3	4	3	3	2	5
4	1	5	1	1	2	4
3	3	3	3	3	3	3
3	1	5	1	1	3	5
2	1	2	1	1	1	2
2	1	3	1	1	4	4
4	3	4	2	2	5	5
3	3	3	3	3	3	3
3	1	2	3	1	3	3
3	1	4	2	2	4	5
4	1	2	1	1	4	3
0	0	0	0	0	0	0



SSN	Progr	Gender	Div	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14
230270302	RM	F	236	2	1	5	3	5	4	5	5	3	2	3	1	5	5
230410090	C	M	233	4	4	4	4	4	4	4	4	4	4	4	4	4	4
231415921	C	M	238	4	2	5	4	5	5	5	5	2	5	5	5	5	5
232257468	AO	M	237	4	4	4	4	4	4	4	4	3	4	4	4	4	4
233316233	RM	M	233	4	3	4	4	4	4	5	4	2	4	4	3	3	4
234195524	C	M	238	4	4	4	4	2	5	5	4	2	3	4	4	4	4
234331672	AO	F	234	5	1	5	4	5	5	5	5	1	2	5	5	5	5
235355563	RM	M	233	4	2	5	4	4	5	4	5	4	3	4	4	4	4
239397670	AO	F	236	2	4	5	2	3	5	5	5	3	2	4	4	4	4
240556411	C	M	233	4	3	4	3	4	5	4	4	3	1	4	4	4	4
243572953	AO	M	238	4	3	4	4	4	5	5	5	4	5	4	4	4	4
244153504	RM	M	238	4	1	5	5	5	5	5	5	1	5	5	5	5	5
245041869	AO	M	233	3	2	4	3	4	4	4	4	3	3	4	3	4	3
248490686	C	M	237	4	3	4	2	4	5	5	4	4	4	4	4	4	5
248491184	AO	M	237	4	4	4	3	4	5	5	4	3	4	4	4	4	4
249733936	AO	M	235	5	5	5	5	4	5	5	5	2	4	4	5	5	5
250690120	AO	M	237	4	4	3	2	5	5	4	3	2	4	5	2	4	4
252572948	RM	M	238	5	1	0	4	5	5	5	1	1	4	5	5	5	5
253151461	RM	F	234	4	2	4	4	5	5	4	3	2	4	4	4	4	4
254270747	RM	F	234	4	5	4	3	3	5	3	2	3	3	5	3	4	3
254471605	AO	F	234	4	4	5	2	5	5	5	2	1	4	5	5	5	5
254634848	RM	F	234	2	4	4	4	4	3	4	2	1	2	4	2	3	1
255636863	RM	M	237	4	2	2	2	3	1	2	1	2	2	1	2	2	1
256063246	C	M	237	2	4	4	3	5	4	3	2	4	4	4	4	3	5
257310338	C	F	236	4	2	4	4	4	5	4	3	2	2	5	4	5	4
257610080	AO	M	237	4	3	5	4	5	5	5	5	1	5	5	5	5	5
258614057	C	M	235	5	1	5	5	5	5	5	5	1	4	1	5	5	5
258635235	C	M	235	4	3	5	5	3	5	5	5	3	5	5	5	5	5
260639093	RM	M	237	2	3	2	4	5	4	1	4	4	1	2	1	1	5
262857031	RM	F	236	2	4	4	4	4	4	4	3	2	2	4	4	4	4
262950050	AO	F	234	4	4	4	3	5	4	4	4	4	2	4	4	4	4
263855201	C	M	238	4	0	3	4	5	5	5	5	5	5	4	5	5	4
264875300	AO	M	235	4	1	4	3	5	5	4	3	3	1	4	4	2	5
278880006	RM	F	234	4	1	4	2	5	4	4	3	1	4	4	4	4	4
282882452	AO	F	234	4	2	4	4	5	5	4	3	1	4	5	5	5	5
283829092	RM	M	235	4	5	4	3	5	4	4	4	3	3	4	2	4	4
288867569	AO	F	236	4	3	4	4	4	4	4	4	2	3	4	4	4	4
291829141	C	M	233	2	2	4	5	5	4	4	4	2	3	1	4	0	5
302806747	AO	F	236	3	2	5	4	4	5	5	5	1	4	5	4	4	4
313967398	C	M	233	4	2	4	3	4	4	4	4	2	3	4	3	4	4
316043486	RM	M	235	4	1	4	4	5	5	5	5	5	4	5	5	5	5
316989493	C	M	233	3	3	4	4	3	4	5	3	4	3	4	4	4	5
317785093	C	M	235	2	2	2	2	2	2	2	2	2	2	2	2	2	2
320805335	RM	M	233	4	3	4	3	4	5	4	4	1	4	4	4	5	4
321646714	RM	M	235	4	5	4	2	5	5	5	2	4	2	5	4	4	5
322680935	RM	F	234	4	1	5	5	5	5	5	5	2	5	4	4	4	5
328685245	AO	M	233	4	4	4	4	4	4	4	4	4	4	4	4	4	4

PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22	PQ23	PQ24	PQ25	PQ26	PQ27	PQ28	PQ29	PQ30	PQ31	PQ32	PQ33
3	5	3	3	1	2	5	5	4	5	5	5	2	4	3	3	4	2	2
4	4	4	4	2	2	4	2	2	2	4	2	2	4	1	3	3	1	3
5	5	5	1	2	2	5	2	5	5	5	2	1	5	1	1	5	1	1
4	4	4	4	2	4	4	4	4	4	4	4	4	4	2	4	4	2	2
2	3	3	2	2	2	4	2	4	2	4	2	3	3	2	3	3	1	1
3	0	4	5	1	2	4	2	4	3	5	4	2	4	1	4	1	1	1
3	5	5	1	1	3	5	2	5	5	5	5	5	5	1	3	1	5	1
3	4	3	4	3	4	4	5	3	3	4	5	3	5	4	4	4	2	1
1	4	4	1	2	3	4	1	4	1	2	3	1	2	2	3	3	1	1
2	5	3	5	1	3	3	2	4	5	4	4	2	4	1	1	1	1	1
2	4	4	2	4	2	4	2	4	4	4	5	1	4	2	2	4	3	2
1	5	5	2	2	1	5	2	5	5	5	4	1	5	2	5	2	3	1
3	4	3	3	2	3	2	4	4	3	3	3	2	3	3	3	3	3	3
2	4	2	1	1	2	5	1	4	4	5	5	5	5	0	0	5	0	1
4	4	4	2	3	4	5	2	4	4	4	4	4	4	4	4	4	1	1
4	5	5	3	3	3	3	4	4	4	4	3	2	4	1	4	4	1	1
2	4	4	2	1	4	4	2	4	2	4	1	1	4	1	2	2	3	2
1	4	4	1	1	2	5	1	4	1	4	1	1	4	1	1	2	1	1
2	4	4	1	3	4	4	2	4	2	4	3	2	4	1	3	4	1	1
2	3	4	1	3	2	5	1	4	1	4	3	1	3	1	2	4	3	1
1	5	5	3	3	1	5	1	5	1	5	5	1	5	2	2	5	1	1
2	3	2	2	1	2	4	2	2	2	4	2	2	2	1	1	1	1	1
4	5	1	2	2	4	1	2	2	1	2	4	5	2	1	1	1	1	1
1	4	4	3	2	1	5	5	5	1	4	2	2	5	1	4	3	4	1
2	5	5	4	3	4	5	2	4	4	4	3	1	4	1	2	4	3	3
1	5	5	1	3	1	5	1	5	4	5	4	1	5	1	4	4	1	1
1	5	5	1	1	1	5	1	5	5	5	1	1	5	1	5	5	1	1
3	5	5	3	3	5	5	2	5	3	5	5	3	5	1	2	3	1	1
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2	4	4	2	2	2	4	2	4	2	4	2	2	4	1	3	3	1	1
4	4	4	4	2	4	4	2	3	4	4	3	2	2	5	2	1	5	4
1	5	4	5	5	3	5	1	5	5	5	5	1	5	1	5	5	3	1
5	1	4	2	2	3	4	3	3	4	2	2	2	2	3	3	2	3	2
4	4	4	3	2	4	5	4	4	4	4	4	4	4	2	3	2	2	2
1	5	5	5	4	2	5	1	5	5	5	4	1	5	1	4	4	1	1
3	4	3	4	3	3	5	4	2	4	4	4	1	3	1	1	2	1	1
2	4	4	2	2	2	4	2	4	2	4	2	2	3	1	3	3	1	1
4	3	5	4	2	2	4	2	4	3	1	5	2	4	1	2	3	1	1
1	4	4	2	1	4	4	2	4	1	4	2	2	4	1	3	4	3	1
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1	5	4	3	1	3	5	3	5	1	5	2	1	5	2	4	3	4	1
4	3	3	4	2	3	4	3	3	4	4	4	2	3	2	2	2	2	2
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1	4	3	2	2	2	2	2	4	4	4	2	1	2	1	1	1	1	1
2	4	4	2	2	4	4	2	4	2	4	2	1	4	1	2	3	2	2
1	4	5	2	3	1	3	2	4	4	4	2	1	4	1	5	2	2	1
4	4	4	4	2	4	4	4	4	4	4	4	2	4	1	1	4	1	1

PQ34	PQ35	PQ36	PQ37	PQ38	PQ39	PQ40
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5	1	5	1	1	5	5
4	2	4	2	2	4	4
3	1	2	1	1	3	3
4	1	5	1	1	3	4
5	1	5	1	1	5	5
4	4	2	2	1	4	4
2	2	4	2	3	4	4
1	1	1	1	1	1	1
3	2	5	3	5	4	4
5	3	4	1	4	3	3
3	3	3	3	3	3	3
1	1	3	1	1	3	3
5	3	5	2	1	5	5
4	1	5	1	1	4	5
3	1	4	1	3	2	2
1	2	5	1	1	2	4
3	1	5	1	1	3	4
3	1	4	1	1	3	5
5	1	5	1	1	5	5
3	1	1	1	1	2	1
1	1	2	1	2	1	2
2	2	4	1	4	3	4
4	3	4	3	3	4	4
4	1	4	1	1	3	4
5	1	5	1	1	5	5
4	1	5	1	1	3	5
2	4	5	1	3	3	2
3	1	3	1	1	3	3
1	4	3	5	5	1	2
5	3	5	3	3	5	5
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4	1	5	2	1	4	4
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2	2	2	2	2	2	0
2	1	1	1	1	1	1
3	2	4	2	2	4	3
5	1	5	1	1	2	5
4	1	4	1	1	5	4

SSN	Prog	Gender	Div	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14
330681212	C	M	233	4	3	5	5	5	5	5	3	1	3	4	5	5	5
330724123	IRM	M	233	4	3	4	5	4	4	4	3	3	4	2	3	3	3
332727126	IRM	M	235	4	4	4	3	5	5	4	3	3	2	4	4	4	5
335621921	AO	M	237	4	5	4	4	4	5	3	2	4	4	2	4	5	5
351665179	AO	M	235	4	5	4	2	5	5	5	3	5	2	5	3	5	5
352766571	AO	M	237	4	2	4	3	4	5	4	4	2	2	4	4	4	4
353762840	AO	M	237	4	5	4	4	5	5	5	3	1	4	5	5	5	5
354685620	AO	M	235	4	3	5	5	5	5	4	0	3	3	5	5	4	5
355688151	C	M	235	5	4	4	2	4	5	5	5	5	2	4	4	5	5
360669734	AO	M	233	5	4	4	4	5	5	5	5	1	3	4	4	4	4
360747390	RM	F	234	4	2	5	4	5	5	5	4	2	4	5	4	4	5
361745659	C	M	233	4	4	4	2	4	5	5	1	2	3	2	4	4	4
362888195	RM	M	238	4	4	5	4	5	5	5	5	1	5	5	5	5	4
363065998	AO	M	235	4	3	4	4	4	5	5	4	4	5	5	3	4	5
363820374	AO	F	234	2	2	3	3	2	4	4	3	2	2	4	2	4	4
363925421	C	M	233	3	1	2	3	2	5	3	5	4	3	2	4	2	2
371022442	AO	F	234	4	5	5	4	5	5	4	4	3	1	4	4	4	4
374885896	RM	M	238	2	4	4	2	5	5	5	2	2	3	5	3	4	5
396869815	RM	M	233	5	2	4	4	5	5	4	4	1	4	4	4	5	5
399663249	AO	F	234	4	5	4	3	5	5	5	5	2	5	4	4	4	5
401176347	AO	M	238	4	1	4	4	1	4	4	5	4	4	5	5	5	4
411412271	AO	M	237	4	4	4	4	4	4	4	4	2	4	4	4	4	4
414314654	C	M	238	4	4	5	5	5	5	5	5	2	4	5	5	4	5
418156086	RM	M	238	4	2	4	4	4	5	4	2	2	4	4	5	5	4
420233024	RM	M	238	3	1	4	1	1	0	1	1	1	3	3	3	1	3
420983860	C	F	236	1	3	5	4	4	5	3	3	3	4	3	3	3	4
422271001	C	M	238	4	2	4	3	4	5	4	4	3	4	4	4	4	4
423131466	AO	M	235	2	2	3	3	3	5	3	2	4	3	3	3	3	4
425511051	RM	F	236	4	4	4	4	2	4	4	0	2	2	4	4	4	4
429671807	C	M	233	5	1	5	4	5	5	5	3	1	4	5	1	4	5
431350965	C	F	236	4	3	4	4	4	5	4	4	2	4	4	4	4	4
432619135	C	F	236	4	2	4	4	4	4	5	4	4	2	4	4	4	4
433730373	AO	F	236	2	2	4	2	4	4	4	2	4	4	4	4	4	4
433733185	RM	M	233	4	2	5	3	5	5	5	4	2	3	4	4	4	4
434596439	RM	M	235	2	4	4	2	5	5	5	4	2	1	5	5	5	5
434656760	RM	M	235	4	4	0	4	4	4	4	4	4	4	4	4	4	2
434698831	AO	M	233	4	4	4	5	5	4	4	2	2	2	4	2	4	4
435531753	RM	M	237	2	4	4	4	4	4	4	4	2	3	3	4	4	4
437211754	AO	M	233	2	2	4	3	5	5	4	4	3	2	4	2	4	4
437357405	RM	M	238	4	5	4	3	5	4	4	4	3	4	4	4	4	4
438335318	C	F	234	4	1	5	5	5	5	2	4	1	2	5	5	5	4
438435862	AO	M	233	4	1	5	4	4	4	4	2	1	4	5	4	2	5
438553157	C	M	238	2	5	4	2	4	5	5	4	4	2	5	4	5	5
438557878	AO	M	237	4	4	4	3	4	4	4	4	2	3	4	4	4	4
440929027	RM	M	235	4	2	4	4	4	4	4	4	3	3	4	4	4	4
442743716	RM	M	237	5	1	4	4	1	1	1	1	1	2	5	2	1	2
443940347	RM	M	237	4	2	5	3	5	5	5	5	4	4	4	3	4	5

PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22	PQ23	PQ24	PQ25	PQ26	PQ27	PQ28	PQ29	PQ30	PQ31	PQ32	PQ33
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3	4	4	4	3	4	4	4	3	3	3	3	3	3	3	3	3	3	3
3	4	3	3	3	4	5	3	3	2	3	3	2	3	1	3	2	1	1
4	4	3	3	1	4	5	5	4	4	5	4	2	4	3	2	5	3	2
4	4	2	2	3	4	5	2	4	4	3	3	2	5	1	3	3	3	3
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2	4	3	1	1	4	2	4	5	4	5	5	0	5	2	5	5	1	5
3	5	4	2	2	1	5	3	4	5	4	1	1	2	3	3	2	1	3
2	4	5	2	2	2	5	2	4	2	5	2	2	5	1	5	5	2	1
1	5	4	3	2	2	4	4	5	5	5	2	1	4	1	4	4	1	1
1	5	5	1	2	2	5	2	5	4	5	4	2	5	1	3	5	1	1
4	4	4	1	2	4	4	4	4	2	4	5	1	3	1	1	1	1	1
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3	4	4	4	1	4	5	5	4	5	4	1	1	4	1	2	4	3	1
1	4	5	2	1	1	5	1	4	4	4	4	2	5	2	2	2	2	2
1	4	5	2	1	2	5	1	4	4	4	5	1	4	1	3	2	2	1
2	5	5	2	2	3	5	3	5	5	4	5	1	5	1	4	3	1	1
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4	5	4	4	2	3	5	2	5	5	5	5	1	4	1	5	5	3	2
2	4	4	2	2	2	1	2	4	4	4	4	2	4	1	2	5	2	1
3	3	1	0	3	3	0	0	2	2	0	0	2	3	0	0	0	0	1
4	2	3	3	1	5	3	2	2	2	3	1	3	1	1	4	4	1	1
2	4	4	2	1	2	4	0	2	2	4	4		4	2	2	2	2	1
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4	2	4	4	2	2	4	2	4	2	4	2	2	4	2	2	3	2	1
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1	5	4	1	1	2	1	1	5	2	5	1	1	5	1	4	3	1	1
2	2	4	2	2	2	4	2	4	4	4	2	2	4	4	4	4	2	2
2	3	3	4	2	2	4	3	4	2	2	2	2	2	1	4	4	2	2
2	4	4	2	3	2	4	2	4	4	4	4	2	3	3	3	2	4	3
2	3	2	4	3	4	2	4	4	3	3	4	1	4	1	3	2	3	1
4	4	4	4	2	2	5	2	4	1	4	4	1	5	2	3	4	2	3
4	1	5	5	5	1	4	1	5	2	4	4	2	4	1	1	4	1	1
2	5	5	1	1	2	5	2	5	2	5	1	1	4	1	1	4	1	1
4	3	4	2	1	4	5	1	5	2	5	1	1	2	1	1	1	1	1
2	0	4	2	2	4	4	3	4	3	4	2	2	3	1	5	5	1	1
2	4	4	4	3	3	4	3	4	2	4	3	3	4	1	1	3	1	1
3	1	5	1	5	4	2	3	3	1	3	3	3	3	1	5	5	5	1
0	2	4	3	3	2	4	1	4	3	5	5	1	4	1	2	4	1	1

PQ34	PQ35	PQ36	PQ37	PQ38	PQ39	PQ40
1	1	1	1	1	1	1
3	3	3	3	3	3	3
4	1	5	1	1	5	5
3	2	3	2	4	4	4
3	3	3	3	3	3	0
3	3	3	3	3	3	3
5	5	3	0	2	4	5
3	3	4	3	3	2	4
5	1	5	2	2	5	5
5	1	4	1	1	4	4
5	1	5	1	1	5	5
3	1	3	3	1	2	1
4	1	4	1	2	4	5
2	2	5	1	2	1	4
3	2	4	1	3	1	1
3	3	5	3	4	4	5
2	1	5	1	2	4	5
2	4	4	2	4	2	3
3	1	4	1	0	1	3
4	1	4	1	1	4	4
5	1	4	2	1	4	4
2	2	2	2	2	2	2
3	2	5	1	1	3	5
4	1	5	1	1	5	5
0	3	0	3	0	0	4
4	1	5	1	1	5	5
4	1	5	1	1	3	5
3	3	4	3	3	3	4
2	1	4	2	2	3	3
0	5	1	1	5	5	0
2	1	2	1	1	4	3
4	2	4	4	3	4	4
2	1	5	1	1	1	5
1	3	4	1	1	5	4
4	1	5	1	1	4	5
4	4	4	2	2	4	4
4	2	5	1	2	4	4
3	4	5	3	5	3	1
2	0	1	2	1	1	2
2	3	4	3	4	2	5
5	1	5	1	1	5	4
2	1	5	1	1	5	4
1	1	4	1	1	1	4
3	1	4	1	1	4	5
3	3	4	3	3	3	3
3	1	5	1	2	5	5
4	1	4	1	1	5	5

SSN	Progr	Gender	Div	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14
444887828	RM	M	238	5	5	4	4	5	5	5	4	4	4	5	4	4	5
445840185	RM	M	235	2	5	2	1	4	5	5	3	4	2	4	4	2	4
447745299	C	M	233	4	2	4	4	4	4	4	4	2	4	4	4	4	4
447929634	C	M	235	5	1	5	5	5	5	5	5	0	5	5	5	5	5
449775825	RM	M	238	4	2	4	3	5	5	5	5	4	2	4	4	4	5
449972440	C	M	235	4	5	4	4	5	5	5	5	1	5	5	5	4	5
450957390	C	M	233	4	2	5	4	4	4	4	5	4	4	5	5	4	5
452634332	C	M	233	4	3	5	4	4	4	4	4	4	3	4	2	3	4
452695478	AO	M	237	2	1	4	4	5	5	4	4	2	4	5	4	4	5
454834818	C	M	238	2	4	4	4	4	4	4	2	5	2	4	4	4	4
454937900	C	M	238	4	2	2	4	4	5	5	4	4	4	5	4	4	5
455878195	C	M	235	4	3	4	4	4	5	3	3	5	5	4	2	4	5
457613198	RM	M	237	4	4	4	2	4	2	4	3	2	4	4	4	3	3
457657206	AO	M	233	4	2	5	5	5	5	4	4	3	4	5	4	4	5
458854617	AO	M	235	5	5	5	5	5	5	5	5	3	4	5	5	5	5
463796866	RM	M	233	2	4	4	2	4	5	5	2	4	2	5	4	5	4
464414791	RM	F	236	2	1	5	3	5	4	5	1	5	1	3	1	1	4
464475757	C	F	234	4	5	4	4	5	5	5	4	2	4	5	4	4	4
464914268	AO	M	235	4	5	4	3	5	5	5	5	2	4	5	4	4	5
466777265	RM	M	237	4	3	4	5	5	5	5	4	4	4	5	4	4	4
467416882	AO	M	237	3	4	4	4	5	5	4	5	2	2	4	5	5	4
467516569	C	M	235	4	4	4	3	3	5	4	4	3	4	5	3	2	4
474155312	RM	M	237	4	4	3	3	5	5	4	3	3	3	4	2	4	4
474963732	C	F	234	2	0	4	4	3	4	3	4	4	2	4	1	3	2
476029798	C	M	237	4	4	4	4	4	5	5	3	2	4	5	4	4	5
476297826	C	M	235	4	1	4	3	4	4	4	2	3	4	4	3	4	4
482029134	RM	F	234	4	5	4	4	5	5	5	4	4	4	4	4	4	5
483903771	AO	M	233	4	4	4	2	5	5	5	4	2	2	5	3	5	5
484084146	AO	M	234	4	1	4	3	5	5	5	4	1	4	5	5	4	5
487946653	C	M	233	4	2	4	4	4	4	4	3	2	4	4	4	4	4
495867580	RM	M	238	2	2	2	2	5	4	5	3	4	2	4	2	4	4
506139016	RM	M	237	5	5	4	0	5	5	5	5	4	5	3	5	4	5
508984677	C	F	236	4	4	5	4	5	4	4	5	2	2	4	2	4	4
512948854	AO	M	238	2	1	1	2	1	1	1	1	1	1	1	1	1	1
515766180	RM	M	233	4	2	5	4	5	5	4	4	1	2	4	4	4	4
517119820	RM	M	233	4	3	5	3	5	5	5	4	2	4	5	4	5	5
517760145	AO	F	236	4	2	4	2	4	4	4	2	4	0	2	4	3	4
517762376	AO	M	235	4	2	5	5	5	5	5	5	5	4	5	5	5	5
517863523	RM	M	233	3	2	4	4	4	5	5	5	1	2	5	4	4	5
519086140	C	F	234	4	4	4	4	4	4	4	3	2	4	4	4	4	4
520889977	RM	M	233	3	3	4	4	4	5	5	5	1	5	5	4	5	5
520901080	C	M	237	4	5	5	4	5	4	5	5	1	5	4	5	5	1
520988077	C	F	236	2	3	1	2	1	1	1	4	4	2	2	2	2	2
524470521	AO	M	237	4	2	2	4	4	4	4	3	4	4	4	3	4	5
525677055	C	M	233	4	2	5	4	4	5	4	4	2	5	4	4	4	4
525696126	RM	F	236	4	1	4	4	5	5	5	3	1	4	5	5	5	5
526810212	C	M	237	4	3	4	5	5	5	5	5	5	5	5	5	5	5

PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22	PQ23	PQ24	PQ25	PQ26	PQ27	PQ28	PQ29	PQ30	PQ31	PQ32	PQ33
3	5	4	4	5	2	4	2	2	4	5	4	1	5	1	2	4	1	1
4	4	4	4	2	4	4	4	4	4	4	4	2	4	3	1	4	2	2
2	2	3	2	4	2	4	2	4	4	4	4	4	4	3	1	1	1	1
1	5	5	1	1	5	5	1	5	5	5	5	1	5	1	3	5	1	1
4	4	4	2	1	4	5	2	4	4	4	4	1	4	1	2	3	1	1
1	5	5	2	2	1	5	1	5	2	5	2	1	5	1	5	4	1	1
5	5	4	4	5	4	5	3	5	4	4	4	5	4	1	5	5	1	1
4	4	4	3	4	3	5	3	4	3	4	4	2	4	1	2	2	2	1
4	5	5	2	2	2	5	2	5	2	5	2	2	4	1	1	2	1	1
5	3	2	1	3	2	4	5	4	3	4	2	2	3	4	4	2	3	5
4	4	4	2	2	2	5	2	4	4	4	4	2	4	3	3	3	3	1
3	4	4	2	2	2	4	2	2	3	3	1	2	4	1	4	5	1	2
4	4	4	4	3	4	2	3	4	3	3	4	4	2	2	2	3	2	2
2	5	2	4	5	5	4	2	5	4	3	5	1	5	1	2	4	4	1
2	5	4	5	2	2	5	3	5	4	5	4	2	4	1	3	5	1	1
2	5	4	1	2	4	5	2	4	5	5	2	1	2	1	3	4	1	1
1	1	3	4	1	1	5	2	4	1	1	1	4	1	1	3	4	1	3
1	4	4	2	4	4	4	2	4	4	4	4	2	4	1	1	2	2	1
2	4	4	2	2	2	5	4	5	2	4	5	1	2	1	4	4	2	1
3	4	5	5	3	0	4	4	4	2	4	2	1	4	3	3	4	3	3
1	4	4	2	2	1	4	3	5	2	4	2	4	1	3	3	2	1	1
3	3	3	3	1	3	5	3	3	4	4	4	3	3	3	3	3	2	2
2	4	3	2	3	2	2	2	4	2	4	3	2	1	1	4	4	2	2
3	4	3	2	2	0	4	4	4	4	4	4	3	4	1	4	3	2	4
3	5	4	1	1	2	5	2	4	2	4	5	2	4	1	3	2	1	1
2	5	4	2	1	2	1	1	4	2	3	1	4	3	2	3	3	1	2
1	4	4	2	0	2	5	2	4	2	4	4	2	4	1	4	4	1	1
1	4	2	2	2	4	5	3	4	3	4	5	1	4	1	1	1	1	1
2	4	5	1	2	3	5	1	4	2	4	3	1	5	1	3	4	2	2
2	4	4	2	2	2	4	2	4	4	4	4	2	4	1	1	1	1	1
4	4	4	2	2	3	5	4	4	4	4	4	2	3	1	3	3	3	1
1	5	4	3	4	1	5	2	4	1	4	5	1	5	1	0	4	1	1
2	4	4	2	1	2	4	2	4	2	4	2	2	2	2	3	4	2	1
1	1	2	2	2	1	1	2	1	1	1	2	3	1	1	1	1	1	1
1	4	4	2	2	2	5	2	4	4	4	2	2	4	1	1	2	2	1
4	4	5	2	2	3	4	2	4	4	5	1	2	3	1	5	5	1	1
3	4	3	2	2	3	4	2	4	3	4	2	2	4	1	3	4	2	2
1	5	5	2	2	3	4	2	5	5	5	3	1	5	1	1	5	1	1
1	5	1	1	1	1	4	2	5	3	4	1	1	5	0	0	0	0	0
2	4	4	2	2	2	4	2	4	2	4	2	2	4	1	5	3	1	1
2	4	4	2	1	1	5	0	5	5	5	1	1	5	1	5	5	2	1
5	4	4	4	1	1	5	5	5	5	1	3	2	4	5	2	1	2	1
4	2	2	5	5	3	1	4	1	4	2	2	5	2	1	4	4	2	2
3	4	5	2	2	3	4	4	4	2	2	1	3	2	2	3	3	4	2
2	2	4	2	3	2	4	2	4	4	4	4	1	4	1	2	4	1	1
2	5	5	2	2	1	5	2	5	5	5	5	1	5	1	1	4	1	1
4	5	5	5	0	3	5	5	5	2	5	1	5	1	2	5	5	1	1



PQ34	PQ35	PQ36	PQ37	PQ38	PQ39	PQ40
3	1	4	1	2	3	3
3	2	5	2	2	4	4
1	1	1	1	1	1	1
4	1	4	1	1	5	5
4	1	5	1	1	4	5
5	2	5	1	1	5	5
4	1	5	1	0	5	0
3	1	4	1	1	3	4
3	1	5	1	1	4	4
2	2	4	5	4	2	3
4	2	5	2	4	4	4
1	1	4	1	1	5	1
3	1	4	1	2	2	3
4	1	5	1	2	4	0
4	1	5	1	1	5	5
5	1	5	1	1	4	4
1	2	5	2	1	5	3
4	1	4	1	1	4	4
4	2	4	1	2	4	0
4	2	4	1	5	5	0
3	1	3	1	1	3	3
3	1	5	3	2	4	5
3	1	4	2	3	4	4
3	2	3	4	2	2	4
2	1	3	1	1	3	3
1	1	3	2	0	4	4
4	1	4	1	1	4	4
1	1	1	1	1	1	1
4	2	4	1	1	4	4
3	1	1	1	1	3	1
4	1	3	1	2	3	3
4	1	4	1	2	3	2
4	1	4	1	1	4	4
1	2	1	1	1	1	0
4	1	3	1	1	2	3
5	1	5	1	1	5	5
4	1	4	2	4	5	4
1	1	5	1	1	4	4
0	0	0	0	0	0	4
4	1	5	1	1	5	5
5	1	5	1	1	5	5
2	3	3	3	3	1	1
5	3	5	3	3	4	5
2	4	3	2	4	3	3
5	1	4	1	0	4	0
4	1	4	1	1	4	3
5	1	5	1	1	5	5

SSN	Prog	Gender	Div	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14
527933369	C	M	233	4	4	4	4	2	5	5	4	2	3	4	4	4	5
528539383	AO	M	238	3	4	4	4	4	4	4	4	4	2	4	3	3	4
529536789	RM	F	236	4	4	4	4	4	5	4	3	2	4	4	5	4	5
530236755	C	M	235	4	4	3	3	4	5	4	4	3	4	3	2	2	3
530936406	RM	M	237	5	4	4	3	5	5	5	4	3	4	5	4	4	5
530965411	C	M	233	4	3	4	4	4	4	4	4	3	4	4	5	3	4
531111250	RM	M	235	5	4	4	4	4	4	4	2	2	2	4	4	4	4
533822382	C	F	236	4	4	4	4	4	4	4	4	2	4	4	4	4	4
533964715	C	M	238	3	1	4	2	5	5	4	5	1	2	5	4	5	5
535060532	C	F	236	5	2	4	4	4	5	5	4	1	4	4	4	4	4
538312181	RM	M	238	4	2	4	4	4	4	4	0	4	5	5	5	5	1
538967932	C	M	237	4	4	3	3	5	5	5	3	3	4	5	3	4	5
540253293	RM	M	237	4	0	3	4	3	4	4	4	3	3	3	4	4	4
540338365	RM	F	234	2	4	3	2	5	4	3	3	2	2	4	3	4	4
540928468	C	M	233	4	4	4	3	5	5	4	3	2	3	3	2	3	4
542026971	RM	F	236	3	2	4	2	3	4	4	3	2	3	4	3	4	4
542116556	AO	F	234	4	4	4	3	4	5	4	4	4	4	5	5	5	1
542250929	AO	F	236	3	1	4	3	3	5	5	3	2	4	3	5	4	4
542963225	C	M	238	5	1	5	3	5	3	4	4	4	4	4	4	4	4
543024941	RM	F	236	4	2	5	4	5	5	4	3	2	4	4	4	4	4
543176102	RM	M	233	4	2	5	4	5	5	5	5	4	1	1	1	2	4
543257262	C	M	233	4	4	4	3	5	5	4	3	4	2	4	4	3	5
544219405	AO	F	236	2	3	4	4	4	4	4	3	2	2	4	4	3	4
545578423	AO	M	233	4	2	5	4	4	4	2	3	2	2	4	4	4	4
548530082	RM	M	238	4	3	3	3	5	5	5	2	4	3	5	3	4	5
551474418	AO	M	238	5	2	5	4	5	5	5	5	5	4	4	4	5	5
551692710	RM	M	238	4	4	4	5	4	4	4	2	2	2	3	4	4	2
553794902	RM	M	233	5	1	5	5	4	5	5	4	1	5	5	5	5	5
554554507	RM	F	234	3	3	5	3	4	4	4	3	3	4	5	4	3	5
554691845	C	M	238	4	4	4	3	4	4	4	4	3	4	4	4	4	4
558992533	C	F	236	5	2	5	5	5	5	5	3	1	4	5	4	5	5
559590848	AO	M	235	4	3	4	3	3	4	4	3	3	3	4	4	3	4
559657568	C	M	235	4	2	4	2	4	5	4	3	2	3	4	2	4	4
563537061	AO	M	237	4	5	5	4	5	5	5	5	2	4	5	4	4	5
564935426	C	M	238	3	2	4	4	4	5	4	3	3	2	5	4	4	5
566596933	C	M	235	3	4	4	4	4	5	2	3	2	5	4	3	4	4
566696912	AO	M	235	2	2	4	2	4	5	4	4	3	2	3	4	4	4
566799763	RM	M	237	4	3	4	4	4	5	5	4	2	5	4	3	4	4
569592790	RM	M	235	4	4	4	4	4	4	4	5	4	4	4	4	4	4
571476142	AO	M	235	4	1	4	4	4	4	4	4	4	2	4	4	4	4
572613258	AO	M	233	4	4	5	4	4	5	4	3	4	2	4	4	4	5
573978737	RM	M	235	4	2	4	4	5	5	5	5	2	3	5	3	5	5
574862977	AO	M	235	2	3	3	2	4	5	5	4	4	2	2	3	4	2
575396164	AO	M	238	5	4	5	4	4	4	4	4	4	4	4	4	4	4
575821013	C	M	233	4	4	4	4	4	4	4	4	4	2	4	2	4	4
576672514	RM	M	233	3	3	4	4	3	4	1	4	1	2	3	4	5	4
579827691	AO	M	238	4	3	5	4	5	5	4	4	4	5	5	3	4	4

PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22	PQ23	PQ24	PQ25	PQ26	PQ27	PQ28	PQ29	PQ30	PQ31	PQ32	PQ33
2	4	4	1	1	2	4	2	4	4	5	4	2	4	1	3	2	1	1
4	4	4	4	2	3	4	4	3	2	4	3	1	3	2	2	3	4	4
1	4	4	1	2	2	5	4	5	4	4	4	2	4	2	4	4	2	2
2	2	3	3	2	4	4	3	3	3	3	2	1	3	3	3	2	2	2
4	5	4	4	4	4	5	3	4	2	4	4	2	4	1	5	5	1	1
4	4	3	4	3	4	4	2	4	4	4	2	1	4	1	3	4	1	1
4	4	4	2	2	4	4	4	4	4	4	4	2	0	0	4	3	1	1
2	4	4	2	2	4	4	3	4	2	4	2	2	4	2	0	4	2	1
1	5	4	3	1	2	4	1	5	5	5	4	1	5	2	3	4	2	2
2	4	4	2	2	2	5	2	4	4	4	2	2	4	2	2	2	4	3
5	4	4	3	3	4	5	3	4	2	5	3	1	5	1	3	2	3	1
4	4	5	1	1	2	5	1	5	2	5	5	1	4	2	5	5	4	2
2	4	4	2	3	2	4	3	4	4	4	2	2	1	3	3	3	3	3
3	2	3	4	2	2	5	3	4	4	4	1	1	3	3	1	2	2	4
2	3	3	2	2	3	2	4	2	4	4	2	1	2	1	2	3	2	2
2	4	4	3	2	4	4	4	4	3	4	3	0	2	1	3	4	3	2
1	5	5	4	2	3	5	2	4	4	4	3	2	3	1	1	4	0	1
1	5	3	1	1	4	5	3	5	5	5	2	1	5	1	3	5	1	1
4	4	4	4	4	4	4	4	4	4	4	4	4	4	0	4	4	4	0
2	4	4	1	2	2	3	2	4	3	4	4	1	5	1	3	5	1	1
2	4	4	2	3	4	5	2	2	1	5	4	2	2	1	2	2	1	1
2	4	4	2	1	4	5	4	4	2	3	2	2	2	1	1	4	3	1
3	4	4	4	2	4	4	2	4	2	4	2	2	3	2	3	3	2	2
4	2	4	0	4	3	4	2	4	2	4	2	2	4	3	3	3	2	3
3	4	3	4	2	4	5	4	3	3	5	4	1	3	3	1	2	4	1
2	5	4	0	4	4	4	0	3	4	4	4	4	4	1	2	1	1	5
1	5	1	2	2	3	5	1	4	4	4	1	4	0	3	2	3	2	2
1	4	5	1	2	1	5	1	5	5	5	5	1	5	1	5	5	1	1
2	4	4	2	2	3	5	3	0	4	4	2	1	4	2	2	4	1	2
2	4	3	1	3	3	4	3	4	4	4	3	1	3	3	1	2	2	2
1	5	4	1	2	1	4	2	5	2	4	4	1	5	1	1	5	1	1
3	3	4	2	2	4	4	2	4	2	4	4	2	3	1	5	5	1	1
2	4	3	2	2	3	4	2	4	3	4	4	2	4	2	3	3	1	2
2	4	4	4	2	2	4	2	4	4	4	2	2	4	1	4	4	2	1
3	4	4	1	1	2	2	4	4	4	4	2	3	4	1	2	3	3	1
2	4	2	3	2	2	5	2	4	4	3	4	1	3	1	4	4	3	1
3	4	2	4	2	4	3	4	4	3	4	3	2	4	1	2	2	1	1
2	4	4	2	2	2	4	2	4	2	4	4	2	4	1	4	4	1	1
4	4	4	4	3	2	2	2	2	2	5	2	2	2	1	1	5	1	1
4	4	4	1	4	4	4	1	4	1	4	4	1	1	4	1	4	1	1
4	4	4	2	2	3	2	4	2	2	3	2	2	4	1	2	2	3	1
3	5	1	3	1	1	5	1	5	2	5	1	1	2	2	1	3	1	2
4	4	3	2	3	3	4	2	3	2	2	3	5	4	2	3	4	2	1
3	4	5	2	2	2	4	2	4	2	3	2	1	3	2	3	2	2	3
4	2	4	2	4	2	4	2	3	4	4	4	2	2	1	1	5	3	1
4	0	5	3	3	4	4	2	5	2	5	4	1	5	3	3	4	4	2
3	5	5	3	3	4	5	2	4	4	5	5	1	0	4	3	2	3	3

PQ34	PQ35	PQ36	PQ37	PQ38	PQ39	PQ40
4	3	1	1	3	4	0
4	4	3	3	4	2	2
4	2	4	2	3	4	4
3	4	4	3	4	3	3
5	1	5	1	1	5	5
4	1	4	1	2	3	4
4	1	4	1	1	3	4
3	3	4	2	2	3	4
4	1	4	1	1	3	5
2	2	2	3	2	3	2
5	1	5	1	1	5	5
5	3	5	2	3	5	5
2	1	3	1	3	3	3
2	2	3	1	1	1	1
4	2	3	2	1	2	3
3	1	4	2	2	4	3
5	1	5	1	1	5	5
4	1	5	2	1	5	5
4	4	0	0	0	0	0
5	1	5	1	1	5	5
3	1	2	1	1	2	1
4	2	3	1	1	2	3
3	1	3	2	2	3	3
1	2	3	2	3	2	2
2	5	4	2	3	2	3
2	1	5	1	5	5	5
3	4	0	3	3	2	2
5	1	5	1	1	5	5
3	1	3	2	1	4	5
4	3	4	2	4	3	3
4	1	4	1	1	5	5
4	2	5	1	2	5	5
4	2	3	2	2	3	3
4	1	4	1	1	4	5
3	1	3	1	1	2	2
4	2	4	2	5	5	3
2	1	2	1	1	2	2
3	1	4	1	1	4	4
5	1	5	1	1	5	5
4	1	4	1	4	4	0
3	1	4	1	1	4	4
2	3	4	0	3	2	0
2	2	4	2	3	4	4
4	1	5	2	2	2	2
5	1	3	1	3	5	3
4	1	0	3	3	4	4
3	1	4	2	2	3	3

SSN	Prog	Gender	Div	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14
585296217	C	M	235	5	5	5	2	5	4	5	3	3	5	2	5	0	3
589786914	AO	M	238	4	2	4	4	4	5	5	0	4	4	4	4	4	4
591509963	RM	M	235	4	4	4	2	5	5	4	4	2	4	4	4	4	5
591668346	AO	F	236	3	2	4	3	4	4	4	3	3	2	3	2	4	4
595907581	AO	F	236	4	2	4	0	3	1	1	1	2	5	3	1	1	1
601645120	RM	M	233	4	2	4	4	4	4	4	4	2	0	4	4	4	4
602886386	AO	M	233	5	1	5	5	5	5	5	5	1	4	4	4	4	4
602887400	AO	M	238	4	4	4	4	4	5	5	5	4	4	4	4	4	4
603050323	AO	M	233	4	4	4	5	5	4	4	4	3	2	5	3	4	4
604387047	C	M	237	5	3	5	5	5	5	5	1	0	5	5	5	5	5
606054477	C	M	237	5	4	5	5	5	5	5	5	1	5	4	4	4	5
606566424	AO	M	235	5	3	5	5	5	5	4	1	1	4	5	4	4	5
606980444	C	M	237	4	1	5	4	4	4	3	5	5	4	5	5	5	2
607014689	AO	M	237	4	2	4	4	5	4	5	2	3	3	5	5	5	5
609721269	AO	F	234	5	5	5	5	5	5	5	5	5	4	5	2	4	5
610026164	AO	M	238	4	1	5	4	3	5	4	2	4	5	5	1	5	5
610100041	C	F	234	4	2	4	4	4	5	5	3	1	3	4	4	4	4
611053196	RM	M	238	3	4	4	2	2	1	2	4	3	3	4	3	3	4
613604179	RM	F	236	2	4	4	4	4	4	5	5	1	2	4	4	4	5
613741803	RM	M	237	5	5	5	4	5	5	5	5	4	0	5	5	5	5
614070751	C	F	234	3	2	4	4	5	4	4	3	2	3	4	4	4	5
614808064	C	M	238	4	4	4	5	2	5	4	4	4	4	4	5	5	5
615050908	C	M	233	4	3	0	5	4	4	5	4	2	4	4	2	4	3
615188707	RM	M	238	2	2	4	4	4	4	4	2	2	2	4	4	4	5
615427249	AO	M	238	5	1	5	5	5	4	4	4	1	4	5	5	4	5
616961147	RM	F	236	5	0	4	4	3	5	4	4	4	4	4	4	4	4
617568991	AO	M	238	4	5	5	2	5	5	5	3	3	4	4	4	4	2
619249850	C	F	234	4	2	0	4	2	5	3	5	2	2	4	4	4	4
620020982	RM	M	235	2	2	5	5	4	4	2	5	4	2	5	4	1	2
621348806	RM	F	236	4	3	4	4	5	5	4	3	1	4	4	5	3	5
622581907	RM	M	233	4	2	4	4	5	4	4	3	2	4	4	3	4	5
623829329	C	M	233	4	5	4	4	4	4	3	2	4	4	4	3	4	4
624056227	C	M	238	4	2	5	4	4	4	5	5	2	4	5	4	4	5
624981125	C	M	238	4	1	5	5	5	5	5	3	4	4	5	4	5	4
625721795	AO	M	233	5	4	4	4	5	5	5	5	2	4	5	4	5	5
635071198	C	M	238	2	1	5	5	4	4	4	5	5	4	4	2	4	4

PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22	PQ23	PQ24	PQ25	PQ26	PQ27	PQ28	PQ29	PQ30	PQ31	PQ32	PQ33
4	4	3	2	2	5	5	0	3	5	5	0	4	2	0	1	1	1	1
2	4	4	2	3	3	5	2	4	4	4	3	2	4	1	5	5	1	1
2	5	4	4	1	4	3	2	4	4	2	4	1	5	1	3	5	1	3
2	4	3	3	2	4	3	3	2	4	4	2	2	4	1	4	4	1	1
1	5	1	5	2	2	1	5	1	3	1	1	5	1	1	4	5	3	1
4	4	4	2	2	2	4	2	4	4	4	3	2	4	2	4	4	2	2
5	4	4	1	4	1	5	5	5	5	5	5	1	5	1	2	3	1	1
4	4	4	4	4	4	4	4	4	4	4	3	4	4	2	2	2	1	1
4	5	4	5	1	3	5	3	4	3	5	1	1	4	1	1	1	1	1
2	5	4	1	2	2	2	2	5	0	2	4	1	5	1	1	4	1	1
1	5	4	1	1	2	5	1	5	4	5	2	1	4	1	4	4	1	1
1	5	3	0	1	2	4	1	5	5	5	5	2	4	2	3	4	4	2
2	5	5	1	3	3	1	2	1	1	2	1	2	5	1	1	4	2	3
3	4	5	4	3	3	5	4	4	4	4	4	1	2	2	4	1	1	1
4	4	4	1	3	1	5	2	4	4	5	5	1	2	1	1	2	3	4
5	4	2	2	2	5	5	0	4	0	5	0	4	5	1	4	2	1	1
2	4	4	1	1	3	4	3	4	3	4	4	2	4	1	2	3	1	1
3	4	3	2	2	1	0	2	5	3	4	4	3	3	3	1	3	4	2
1	4	3	2	1	2	5	2	4	4	5	2	2	4	2	3	4	1	1
4	4	5	1	3	3	5	1	5	1	4	5	2	5	1	4	5	3	1
2	4	4	2	3	2	5	3	4	2	4	3	2	4	1	3	2	3	3
4	5	5	5	3	3	5	4	5	4	5	4	2	5	1	2	2	3	1
3	4	3	2	2	3	4	2	4	1	4	2	2	4	2	3	1	1	1
3	4	3	2	2	2	4	2	3	4	2	2	2	3	3	1	3	1	2
1	5	4	4	1	3	4	3	5	4	5	4	1	5	1	2	5	3	1
2	4	4	2	2	3	4	2	4	3	4	3	4	4	3	3	4	2	1
2	4	3	2	3	5	5	3	5	2	5	5	3	3	1	3	3	1	1
2	5	4	2	2	3	2	4	5	2	4	3	1	4	2	3	4	2	2
5	4	4	2	2	4	2	2	5	1	4	5	1	5	2	3	3	2	2
1	5	1	2	1	1	5	2	5	2	4	3	1	5	2	3	4	2	2
2	4	4	2	2	4	2	2	4	2	4	4	1	4	2	2	4	2	2
4	5	4	2	5	4	4	4	4	4	4	4	4	4	1	4	2	1	1
1	5	4	1	0	1	5	1	4	4	5	4	1	4	1	1	5	1	1
3	5	4	5	3	4	5	3	4	2	5	4	2	4	2	4	4	2	2
1	5	4	1	3	4	5	1	5	5	5	5	3	5	1	5	5	1	1
4	5	4	2	4	3	5	2	4	1	5	3	2	4	2	1	2	4	1

PQ34	PQ35	PQ36	PQ37	PQ38	PQ39	PQ40
5	2	4	2	1	5	5
5	1	5	1	1	5	5
5	1	1	1	3	5	4
4	1	4	1	1	4	4
1	1	5	1	1	5	5
4	2	4	2	2	4	4
5	1	5	2	4	5	5
2	2	2	1	1	2	2
4	1	2	2	1	1	5
5	1	5	1	1	5	5
4	1	5	1	1	4	5
4	1	4	1	1	0	0
3	1	5	1	1	4	5
4	2	3	1	3	4	3
5	1	5	1	1	5	5
1	4	5	1	1	5	5
4	1	4	1	1	3	5
3	1	5	1	3	2	4
3	1	3	1	1	4	3
5	1	5	1	2	5	5
4	1	4	1	2	4	4
4	1	5	1	1	4	5
2	1	2	1	1	2	2
3	2	3	1	2	4	4
5	1	2	1	1	5	5
3	1	4	2	4	3	0
4	2	3	2	1	3	3
3	1	3	2	2	4	3
5	1	1	2	1	3	3
5	2	5	2	4	3	1
3	2	4	2	2	4	4
2	1	5	1	1	2	3
5	1	4	1	1	4	5
4	2	5	1	1	5	5
5	1	5	1	1	5	5
4	1	5	1	1	1	5

SSAN	SessionTime	First_Selected	Second_Select	Third_Selected	Role	Remember	Gender
029641195	0:57	TUTORIAL	TEST	None	0	0	0
065728767	0:42	TUTORIAL	TEST	None	0	0	0
092724434	0:41	TUTORIAL	TEST	None	0	1	0
102845463	1:17	TUTORIAL	TEST	None	0	0	0
110600462	0:47	CONCEPT	TEST	None	0	0	0
116862352	1:20	TUTORIAL	TEST	None	0	0	0
117600388	0:53	TUTORIAL	TEST	None	0	0	0
124600339	0:41	TUTORIAL	TEST	None	0	0	0
124724689	1:32	TUTORIAL	TEST	None	0	0	0
137669309	1:17	TUTORIAL	TEST	None	2	4	0
137865156	0:55	TUTORIAL	TEST	None	0	0	1
150642918	0:59	TUTORIAL	TEST	None	2	1	1
154784818	0:40	TUTORIAL	TEST	None	0	1	0
166667854	0:39	TUTORIAL	TEST	None	0	2	0
211542430	0:46	TUTORIAL	TEST	None	0	1	0
224490960	0:42	TUTORIAL	TEST	None	0	0	0
227150718	0:44	TUTORIAL	TEST	None	0	0	0
227418850	0:45	TUTORIAL	TEST	None	0	1	0
229137935	1:09	TUTORIAL	TEST	None	0	0	0
232257468	0:48	TUTORIAL	TEST	None	0	1	0
234331672	0:54	TUTORIAL	TEST	None	0	0	0
239397670	0:42	CONCEPT	TEST	None	0	0	0
243572953	0:35	TUTORIAL	TEST	None	0	0	0
245041869	0:47	TUTORIAL	TEST	None	0	0	0
248491184	0:52	TUTORIAL	TEST	None	1	0	0
249733936	0:41	TUTORIAL	TEST	None	0	0	0
250690120	0:49	CONCEPT	TEST	None	0	0	0
254471605	0:49	TUTORIAL	TEST	None	0	1	0
257610080	0:38	CONCEPT	TEST	None	0	0	0
262950050	0:58	TUTORIAL	TEST	None	0	0	0
264875300	0:54	TUTORIAL	TEST	None	1	0	1
282882452	1:15	TUTORIAL	TEST	None	1	4	3
288867569	0:43	TUTORIAL	TEST	None	0	0	0
302806747	0:35	TUTORIAL	TEST	None	0	0	0
328685245	0:47	TUTORIAL	TEST	None	1	0	0
335621921	0:52	TUTORIAL	TEST	None	0	0	0
351665179	0:41	TUTORIAL	TEST	None	0	0	0
352766571	0:42	TUTORIAL	TEST	None	0	0	0
353762840	0:56	TUTORIAL	TEST	None	0	1	1
354685620	0:49	TUTORIAL	TEST	None	0	0	0
360669734	0:47	CONCEPT	TEST	None	1	0	1
363065998	0:41	CONCEPT	TEST	None	0	3	0
363820374	1:09	CONCEPT	TEST	None	0	2	1
371022442	0:45	TUTORIAL	TEST	None	0	0	0
399663249	0:41	TUTORIAL	TEST	None	0	0	0
401176347	0:53	CONCEPT	TEST	None	1	0	0
411412271	0:11	na	na	None	0	0	0



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SSAN	SessionTime	First_Selected	Second_Select	Third_Selected	Role	Remember	Gender
423131466	0:44	TUTORIAL	TEST	None	0	0	0
433730373	0:56	TUTORIAL	TEST	None	1	3	1
434698831	0:44	TUTORIAL	TEST	None	0	0	0
437211754	0:47	TUTORIAL	TEST	None	0	0	0
438435862	0:41	TUTORIAL	TEST	None	0	0	0
438557878	0:58	TUTORIAL	TEST	None	0	0	0
452695478	0:49	TUTORIAL	TEST	None	0	0	0
457657206	1:00	CONCEPT	TEST	None	2	2	1
458854617	0:52	TUTORIAL	TEST	None	0	0	0
464914268	0:53	CONCEPT	TEST	None	0	2	0
467416882	0:48	TUTORIAL	TEST	None	0	1	0
483903771	0:47	TUTORIAL	TEST	None	0	1	0
484084146	0:38	TUTORIAL	TEST	None	0	0	0
512948854	0:33	TUTORIAL	TEST	None	0	0	0
517760145	0:37	TUTORIAL	TEST	None	0	0	0
517762376	0:35	CONCEPT	TEST	None	0	0	0
524470521	0:56	TUTORIAL	TEST	None	2	2	2
528539383	0:37	TUTORIAL	TEST	None	0	0	0
542116556	1:02	CONCEPT	TEST	None	1	0	0
542250929	1:02	CONCEPT	TEST	None	0	1	0
544219405	0:39	TUTORIAL	TEST	None	0	0	0
545578423	0:17	CONCEPT	TEST	None	0	0	0
551474418	0:56	TUTORIAL	TEST	None	0	1	0
559590848	0:46	TUTORIAL	TEST	None	0	1	0
563537061	0:56	CONCEPT	TEST	None	0	0	0
566696912	1:09	TUTORIAL	TEST	None	4	7	0
571476142	0:44	TUTORIAL	TEST	None	1	0	0
572613258	0:47	TUTORIAL	TEST	None	0	0	0
574862977	0:40	TUTORIAL	TEST	None	0	0	0
575396164	1:10	CONCEPT	TEST	None	0	0	0
579827691	0:41	TUTORIAL	TEST	None	0	0	0
589786914	0:48	TUTORIAL	TEST	None	0	0	0
591668346	0:41	TUTORIAL	TEST	None	0	1	0
595907581	0:46	CONCEPT	TEST	None	0	0	0
602886386	0:51	TUTORIAL	TEST	None	1	0	0
602887400	1:06	CONCEPT	TEST	None	2	2	0
603050323	0:39	CONCEPT	TEST	None	0	0	0
606566424	0:54	TUTORIAL	TEST	None	0	0	0
607014689	1:22	TUTORIAL	TEST	None	0	0	0
609721269	0:17	TUTORIAL	TEST	None	0	0	0
610026164	0:55	CONCEPT	TEST	None	6	5	3
615427249	1:11	TUTORIAL	TEST	None	0	0	0
617568991	0:42	TUTORIAL	TEST	None	0	0	0
625721795	0:34	TUTORIAL	TEST	None	0	0	0

LSQ_1	LSQ_2	LSQ_3	LSQ_4	LSQ_5	LSQ_6	LSQ_7	LSQ_8	LSQ_9	LSQ_10	LSQ_11
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1	0	0	0	0	0	0	0	1	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
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0	0	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0
1	0	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	1	0	1	0	0	0
0	0	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
1	0	1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0

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SSAN	Test_Score	Q1	Q2	Q3_genalarm	Q3_bells	Q4	Q5	Q6	Q7	Q8	Q9_dn
029641195	400	0	1	1	0	0	1	1	0	1	
065728767	701	1	1	1	1	1	1	1	1	1	
092724434	500	1	1	1	0	0	1	1	0	1	
102845463	600	1	1	1	0	0	1	1	0	1	
110600462	350	0	0	1	1	0	1	1	0	0	
116862352	450	0	0	0	0	1	1	1	1	0	
117600388	601	1	1	1	0	1	1	1	0	0	
124600339	400	1	1	1	0	0	0	1	0	1	
124724689	450	1	0	0	0	0	1	1	0	1	
137669309	701	1	1	1	0	1	1	1	1	0	
137865156	751	1	1	1	0	1	1	1	1	0	
150642918	301	0	0	0	0	0	0	1	0	0	
154784818	600	1	1	1	0	1	1	1	1	0	
166667854	600	1	1	1	0	0	1	1	1	1	
211542430	450	1	0	0	0	0	1	1	1	0	
224490960	551	1	1	1	0	1	1	1	0	1	
227150718	500	0	1	1	1	0	1	1	0	0	
227418850	550	1	1	1	0	1	0	1	0	1	
229137935	300	0	1	1	1	0	0	1	0	1	
232257468	800	1	1	1	1	0	1	1	1	1	
234331672	250	1	1	0	1	0	0	1	0	0	
239397670	350	0	1	1	0	0	0	1	0	0	
243572953	450	1	1	1	0	1	1	1	0	1	
245041869	650	1	1	1	0	0	1	1	1	1	
248491184	500	0	1	1	0	0	1	1	1	1	
249733936	701	1	1	1	1	1	1	1	0	0	
250690120	450	1	1	1	0	0	1	1	0	0	
254471605	400	0	0	0	1	0	0	1	0	0	
257610080	500	0	1	1	1	1	1	1	0	1	
262950050	700	0	1	1	1	0	1	1	1	1	
264875300	550	0	1	1	1	1	1	1	0	0	
282882452	350	0	1	1	0	0	1	1	0	0	
288867569	600	1	1	1	1	0	1	1	0	1	
302806747	601	1	0	0	0	1	0	1	1	1	
328685245	400	1	1	1	0	0	1	1	0	0	
335621921	450	0	0	0	0	0	1	1	0	1	
351665179	350	1	0	0	0	0	1	0	0	1	
352766571	550	1	1	1	0	0	1	1	0	1	
353762840	700	1	1	1	1	0	1	1	1	1	
354685620	400	0	1	1	0	0	1	1	0	0	
360669734	751	1	1	1	0	0	1	1	1	1	
363065998	100	1	1	1	0	0	0	0	0	0	
363820374	451	1	1	1	0	0	1	1	0	1	
371022442	350	0	1	1	0	0	0	1	0	0	
399663249	650	1	1	1	0	1	1	1	1	1	
401176347	500	0	1	1	0	0	1	1	0	0	
411412271	80371	1	1	1	1	1	1	1	1	1	

Q9_stern	Q9_port	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17_jettison	Q17_aff	Q17_co2port
1	1	0	1	0	0	1	0	0	0	0	1
1	1	0	1	1	1	1	0	0	0	0	1
1	1	1	1	1	1	0	0	0	0	0	1
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1	1	0	1	0	0	1	0	0	1	1	1
0	1	1	1	0	0	1	1	1	0	0	0
0	1	1	1	0	0	1	1	0	0	1	1
0	0	1	1	1	1	1	0	0	0	1	1
1	1	1	0	0	0	1	1	0	0	0	1
0	0	1	1	1	1	1	0	0	0	1	1
0	1	1	1	1	1	1	0	1	0	1	1
1	0	0	1	1	0	0	1	0	0	0	1
1	0	1	1	1	1	0	0	1	0	0	1
1	1	1	1	0	0	1	1	0	0	1	1
1	0	1	1	0	0	1	0	1	0	0	1
1	0	1	1	0	0	1	0	1	0	0	1
0	1	1	1	0	0	1	1	0	0	1	0
1	1	1	1	1	1	1	0	0	0	0	1
0	1	0	0	1	0	0	0	0	0	0	1
1	1	1	1	1	1	1	0	0	1	1	1
0	0	1	0	1	0	0	0	0	0	0	1
0	0	1	0	0	0	0	1	0	0	0	1
1	1	1	1	0	0	1	0	0	0	0	1
1	1	1	0	1	1	1	1	0	0	1	1
0	0	0	0	1	1	0	1	1	0	1	0
0	0	1	1	1	1	1	1	0	0	0	1
1	1	1	0	1	1	1	0	0	0	1	1
1	1	0	0	1	1	1	1	0	1	1	1
0	0	0	1	1	1	1	0	0	0	0	1
1	1	1	1	1	0	1	1	0	0	0	1
0	0	1	1	1	1	1	0	0	0	0	1
1	1	1	1	1	1	1	0	0	0	0	1
1	1	1	1	0	0	1	0	1	0	0	0
1	0	1	1	1	1	0	1	0	0	1	0
0	1	1	1	1	1	1	0	0	0	1	0
0	1	1	1	1	1	1	0	0	0	0	1
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0	0	1	0	1	1	1	0	0	0	0	0
0	1	0	1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	0	0	0	0	0	0	0	0	1
0	0	1	1	1	1	1	0	0	0	0	1
1	1	1	0	1	1	1	0	1	0	0	1
1	1	1	1	1	1	0	0	1	0	0	1
1	1	1	1	1	1	1	0	1	0	0	1

Q17_co2fixed	Q17_water	Q17_pkp	Q17_halon	Q18	Q19	Q20
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0	0	1	1	0	1	0
0	0	0	1	0	1	1
1	1	1	1	0	1	0
0	0	0	0	0	0	0
0	0	0	1	1	1	0
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0	0	0	0	0	1	0
0	0	0	1	0	1	0
0	0	0	1	0	1	1
0	0	0	1	0	1	0
0	0	0	1	0	1	0
0	0	0	1	1	1	0
0	0	1	0	0	1	0
0	0	0	1	0	1	0
1	1	1	1	1	1	1
0	0	0	0	0	0	0
0	0	0	0	1	1	1
0	0	0	0	0	0	0
0	0	1	0	1	1	0
0	0	0	1	0	1	1
0	0	0	1	0	1	0
0	0	0	1	0	1	0
1	1	1	1	0	1	0
0	0	1	1	0	0	1
0	0	0	1	1	1	1
0	0	0	1	0	1	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	1	1	0	1	1
0	0	0	1	0	1	0
0	0	0	0	0	0	0
0	0	0	0	0	1	1
0	0	1	0	0	0	0
0	0	1	1	0	1	1
0	0	1	0	1	1	1
0	0	1	0	0	1	0
1	1	1	1	1	1	0
0	0	0	0	0	0	0
0	0	0	0	1	1	0
0	0	0	0	0	0	0
0	0	0	0	0	1	0
0	0	0	1	0	1	1
0	0	1	0	0	1	0

SSAN	Test_Score	Q1	Q2	Q3_genalarm	Q3_bells	Q4	Q5	Q6	Q7	Q8	Q9_dn
423131466	350	1	0	0	0	0	0	1	1	0	0
433730373	450	1	1	1	0	0	1	1	1	0	0
434698831	450	1	1	0	0	1	1	1	1	0	0
437211754	600	1	1	1	1	1	1	1	1	1	0
438435862	350	0	1	1	0	1	1	1	1	0	1
438557878	701	1	1	0	0	1	1	1	1	1	0
452695478	300	1	1	1	0	0	1	1	1	0	1
457657206	450	1	1	1	0	0	1	1	1	1	0
458854617	450	0	1	1	0	0	0	0	0	0	0
464914268	851	1	1	1	0	1	1	1	1	1	1
467416882	650	1	0	0	0	0	1	1	1	0	0
483903771	550	1	0	0	1	0	1	1	1	0	1
484084146	751	1	1	1	1	1	1	1	1	0	1
512948854	801	1	1	1	0	1	1	1	1	1	0
517760145	401	0	1	1	0	1	0	1	1	0	1
517762376	700	1	1	1	1	0	1	1	1	0	1
524470521	851	1	1	1	0	1	1	1	1	0	1
528539383	750	1	1	1	0	1	1	1	1	0	1
542116556	450	0	1	1	1	0	1	1	1	0	1
542250929	500	1	0	0	1	1	0	1	1	1	1
544219405	650	1	1	1	0	1	1	1	1	1	1
545578423	350	0	1	1	1	0	0	1	1	0	1
551474418	400	0	1	1	0	0	1	1	1	0	0
559590848	600	1	1	1	0	0	0	1	1	1	0
563537061	650	1	1	1	0	0	1	1	1	1	1
566696912	450	1	1	1	0	0	1	1	1	0	1
571476142	300	0	0	0	0	1	1	1	1	0	0
572613258	401	1	0	0	1	0	1	1	1	0	0
574862977	451	1	0	0	0	0	1	1	1	0	1
575396164	551	0	0	0	1	0	1	1	1	0	0
579827691	451	1	1	1	1	0	1	1	1	1	0
589786914	500	0	1	1	0	0	1	1	1	0	1
591668346	400	0	1	1	0	1	1	1	1	0	1
595907581	550	1	1	1	0	0	1	1	1	0	0
602886386	650	1	1	1	0	0	1	1	1	1	0
602887400	450	1	1	1	0	0	0	1	1	0	0
603050323	600	1	1	1	1	0	1	1	1	0	1
606566424	200	0	0	1	0	0	0	1	1	0	0
607014689	200	1	0	0	0	0	1	1	1	0	1
609721269	80371	1	1	1	1	1	1	1	1	1	1
610026164	201	1	1	1	0	0	0	0	0	0	0
615427249	350	0	1	1	0	0	1	1	1	1	0
617568991	601	1	1	1	0	1	1	1	1	0	1
625721795	600	1	1	1	0	0	1	1	1	0	1

Q9_stern	Q9_port	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17_jettison	Q17_aff	Q17_co2port
0	0	0	1	0	0	1	0	0	0	0	1
0	1	1	1	1	1	0	0	0	0	0	1
1	1	1	1	1	0	0	0	0	0	1	1
0	1	1	1	0	0	1	0	0	0	0	1
0	0	1	1	0	0	1	0	0	0	0	1
0	1	1	0	1	1	1	1	0	1	1	1
1	0	0	0	1	0	0	0	0	0	0	1
0	1	1	0	0	0	1	0	1	0	0	1
1	0	1	0	1	1	1	1	1	0	1	0
1	1	1	0	1	1	1	1	1	0	0	1
0	0	1	1	1	1	1	1	1	0	1	1
1	0	1	0	1	1	1	1	1	0	1	0
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1	0	1	1	1	1	1	1	1	0	0	1
0	0	1	0	0	0	0	1	0	0	0	0
0	0	1	0	1	1	1	1	1	0	0	1
1	1	1	1	1	1	1	1	1	0	0	1
0	1	1	1	1	1	1	1	1	1	1	1
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0	0	0	1	1	1	0	1	1	0	0	1
0	0	1	1	1	1	1	1	0	0	0	1
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0	0	0	0	0	0	0	1	0	0	0	0
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0	1	0	1	0	0	1	0	0	0	0	1
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Q17_co2fixed	Q17_water	Q17_pkp	Q17_halon	Q18	Q19	Q20
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0	0	0	1	0	1	1
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0	0	0	1	1	1	1
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0	0	0	0	1	1	1

SSAN	SessionTime	First_Selected	Second_Select	Third_Selected	Fourth_Selecte	E1_3_male
001725988	0:36	Teamwork	Leadership	Safety	Communication	0
006963714	0:33	Leadership	Safety	Communication	Teamwork	0
027585631	0:31	Teamwork	Safety	Leadership	Communication	0
031667507	0:39	Teamwork	Leadership	Safety	Communication	0
042703652	0:38	Safety	Communication	Teamwork	Leadership	0
082869967	0:53	Teamwork	Communication	Safety	Leadership	0
097745538	0:53	Safety	Communication	Leadership	NONE	0
128649038	0:51	Teamwork	Leadership	Communication	Safety	0
173661863	0:33	Leadership	Communication	Teamwork	Safety	0
180608755	0:38	Safety	Leadership	Teamwork	Communication	0
185646161	0:34	Safety	Leadership	Teamwork	Communication	0
204547214	0:40	Leadership	Safety	Teamwork	Communication	0
205483391	0:43	Safety	Communication	Teamwork	Leadership	0
227272077	0:23	Leadership	Safety	Teamwork	Communication	0
230270302	0:33	Communication	Teamwork	NONE	NONE	0
233316233	0:32	Leadership	Safety	Teamwork	Communication	0
235355563	0:33	Teamwork	Communication	Leadership	Safety	0
244153504	0:39	Leadership	Safety	Teamwork	Communication	0
252572948	0:36	Safety	Communication	Leadership	Teamwork	0
253151461	0:43	Safety	Teamwork	Leadership	Communication	0
254270747	0:41	Safety	Leadership	Teamwork	Communication	0
254634848	1:03	Teamwork	Leadership	Safety	Communication	0
255636863	0:46	Safety	Leadership	Teamwork	Communication	0
260639093	0:41	Teamwork	Communication	Leadership	Safety	0
262857031	0:36	Safety	Communication	Teamwork	Leadership	0
278880006	0:42	Leadership	Safety	Communication	NONE	0
283829092	0:33	Leadership	Safety	Communication	Teamwork	0
316043486	0:36	Leadership	Safety	Teamwork	Communication	0
320805335	0:40	Leadership	Teamwork	Communication	Safety	0
321646714	0:37	Safety	Communication	Leadership	Teamwork	0
322680935	0:34	Teamwork	Leadership	Communication	Safety	0
330724123	0:57	Communication	NONE	NONE	NONE	0
332727126	0:35	Safety	Leadership	Teamwork	Communication	0
360747390	0:34	Leadership	Safety	Communication	Teamwork	0
362888195	0:37	Safety	Communication	Leadership	Teamwork	0
374885896	0:44	Teamwork	Communication	Leadership	Safety	0
396869815	0:35	Leadership	Teamwork	Communication	Safety	0
418156086	0:37	Leadership	Communication	Safety	Teamwork	0
420233024	0:55	Leadership	Teamwork	Safety	Communication	0
425511051	0:28	Teamwork	Communication	Safety	Leadership	0
433733185	0:35	Leadership	Teamwork	Safety	Communication	0
434596439	0:35	Safety	Communication	Leadership	Teamwork	0
434656760	0:36	Safety	Communication	Leadership	Teamwork	0
435531753	0:40	Safety	Leadership	Teamwork	Communication	0
437357405	0:40	Leadership	Communication	Safety	Teamwork	0
440929027	0:37	Teamwork	Communication	Safety	Leadership	0
442743716	0:40	Leadership	Teamwork	Safety	Communication	0



Page 2

E2_11_Student	E2_11_Correct	E2_12_1_a_Stu	E2_12_1_b_Stu	E2_12_1_c_Stu	E2_12_1_d_Stu	E2_12_1_Corre
Bad	1	True			True	0
Bad	1	True			True	0
Bad	1	True		True	True	0
Bad	1	True				0
Bad	1	True				0
Bad	1	True			True	0
	0					0
Bad	1	True			True	0
Bad	1	True	True		True	0
Bad	0	True				0
Bad	1	True				0
Bad	1	True			True	0
Bad	1	True		True		0
Bad	1					0
Bad	0	True	True	True	True	0
Bad	1	True		False	True	0
Bad	1	True			True	0
Bad	1	True	True	True	True	0
Bad	1	True			True	0
Bad	1	True			True	0
Bad	1				True	0
Bad	1	True	True			0
Bad	1	True				0
Bad	1	True		True		0
	0					0
Bad	1	True	True	True	True	0
Bad	1	True	True	True	True	0
Bad	1	True		False	True	0
Bad	1	True			True	0
Bad	1	True	True		True	0
	0					0
Bad	1	True				0
Bad	1				True	0
Bad	1	True			True	0
Bad	1	True			True	0
Bad	1	True	True		True	0
Bad	1	True				0
Bad	1	True			True	0
Bad	1		True		True	0
Bad	1	True			True	0
Bad	1	True	True			0
Bad	1	True			True	0
Bad	1	True			True	0
Bad	1	True				0
Bad	1	True	True			0
Bad	1	True			True	0
Bad	1	True			True	0
Bad	1	True				0
Bad	1	True	True	True	True	0

E2_12_2_a_Stu	E2_12_2_b_Stu	E2_12_2_c_Stu	E2_12_2_d_Stu	E2_12_2_Corre	E2_12_3_a_Stu	E2_12_3_b_Stu
	True	True		1		
		True		0		
		True		0		
			True	0		True
	True			0		
	True		True	0		True
				0		
		True		0		
	True			0		True
	True			0		
			True	0		
	True			0		True
			True	0		True
	True		False	0		
True	True	True	True	0		
	True			0		
	True			0		
	True			0		
True	True			0		
			True	0		
	True		True	0		True
			True	0		
		True		0		
	True		True	0		
True			True	0		
				0		
	True			0		True
	True			0		True
	True	True		0		True
	True		True	0		True
		True		0		
			True	0		
	True			0		
	True			0		True
	True			0		True
	True			0		
	True			0		True
	True	True	True	0		True
	True			0		
	True			0		True
			True	0	True	
			True	0		True
	True			0		True
	True			0		True
			True	0		
	True	True		1		True

E2_12_3_c_Stu	E2_12_3_d_Stu	E2_12_3_Corre	E2_12_4_a_Stu	E2_12_4_b_Stu	E2_12_4_c_Stu	E2_12_4_d_Stu
True	True	0	True	True	True	True
True		0		True		
	True	0			True	True
True		0		True		
	True	0		True		
		1			True	
		0				
		0			True	
True		0			True	
	True	0		False		True
True		0		True		
True		0		True	True	
		0		True		
		1		True	True	
True		0	True		True	
True		0	True	True	True	
True	True	0		True	True	
	True	0	True	True		
	True	0			True	
True		0			True	
True		0	True	True		
True	True	0			True	
True	True	0			True	
True		0		True	True	
True	True	0	True	False	True	
		0				
True		0	True	True		
True	True	0	True	True		
True		0		True	True	
	True	0		True	True	
True	True	0			True	
True	True	0			True	
True	True	0		True	True	
		1	True	True	True	
True		0		True		
True	True	0		True	True	
		1		True	True	
		0		True		
True		0	True	True		
True		0		True		
		0			True	
True		0		True	True	
True		0	False	True	True	
		1		True	True	
True	True	0		True	True	
True		0		True	True	

E2 12 4 Correc	E3 2 1 Studer	E3 2 1 Correc	E3 2 2 Studer	E3 2 2 Correc	E3 5 Student	E3 5 Correct
0OK		0OK		1OK		0
0OK		0OK		1OK		0
0NOTOK		1OK		1NOTOK		1
0NOTOK		1OK		1OK		0
0NOTOK		1OK		1NOTOK		1
1NOTOK		1OK		1NOTOK		1
0NOTOK		0NOTOK		0NOTOK		1
1NOTOK		1NOTOK		0OK		0
1NOTOK		1OK		1OK		0
0OK		0OK		1OK		0
0NOTOK		1OK		1NOTOK		1
0NOTOK		1OK		1OK		0
0NOTOK		1OK		1OK		0
0NOTOK		1OK		1NOTOK		1
0NOTOK		1OK		1NOTOK		1
0OK		0OK		1OK		0
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0NOTOK		1OK		1NOTOK		1
1NOTOK		1OK		1NOTOK		1
0OK		0NOTOK		0OK		0
1NOTOK		1OK		1NOTOK		1
0NOTOK		1OK		1NOTOK		1
0NOTOK		1OK		1NOTOK		1
0NOTOK		1OK		1NOTOK		0
0NOTOK		1OK		1NOTOK		1
0OK		0		0		0
0OK		0OK		1OK		0
0NOTOK		1OK		1OK		0
0NOTOK		1OK		1NOTOK		1
1NOTOK		0OK		1NOTOK		1
0OK		0OK		1NOTOK		1
0NOTOK		1OK		1OK		0
0NOTOK		1OK		1NOTOK		1
0NOTOK		1OK		1NOTOK		1
0OK		0OK		1OK		0

E3_7_male	E3_7_female	E3_7_both	E3_10_a_Stude	E3_10_b_Stude	E3_10_c_Stude	E3_10_d_Stude
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1	1	1			True	
0	0	0	True		True	
1	1	1			True	
1	1	1			True	
1	1	1	True		True	
1	1	1			True	
0	1	0			True	
1	1	1	True		True	
0	0	0				
1	1	1			True	
1	1	1	True		True	
1	1	1	True		True	
1	1	1			True	
1	1	1	True		True	
1	1	1	True		True	
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1	0	0			True	
1	1	1	True	True	False	True
1	1	1			True	
1	1	1			True	
1	1	1			True	
0	0	0				
1	1	1	True		True	
1	1	1	True		True	
1	1	1			True	
1	1	1				True
1	1	1	True		True	
1	1	1			True	
1	1	1	True		True	
1	1	1	True		True	
1	1	1	True		True	

E3_10_Correct	E3_11_1_Student	E3_11_1_Correct	E3_11_2_Student	E3_11_2_Correct	E3_12_Student	E3_12_Correct
0/A		1/A		1/C		1
0/A		1/A		1/C		1
1/A		1/A		1/C		1
0/A		1/A		1/A		0
0/A		1/A		1/C		1
0/A		1/B		0/C		1
0/A		1/A		0/E		0
0/A		1/B		0/C		1
1/A		1/A		1/C		1
0		0		0		0
0/A		1/A		1/C		1
1/A		1/A		1/E		0
1/A		1/A		1/D		0
0/A		1/B		0/E		0
1/A		1/A		1/E		0
1/A		1/A		1/C		1
1/A		1/A		1/C		1
0/A		1/A		1/E		0
1/A		1/A		1/C		1
0/A		1/A		1/C		1
0/A		1/A		1/C		1
1/A		1/A		1/C		1
0/A		1/A		1/D		0
0/A		1/B		0/C		1
1/A		1/A		1/C		1
0/A		1/A		1/E		0
0/A		1/A		1/C		1
1/A		1/A		1/C		1
0/A		1/A		1/C		1
1/A		1/A		1/C		1
0/A		1/A		1/C		1
0/A		1/A		0/D		0
0/A		1/B		0/D		0
0/A		1/A		1/C		1
0/A		1/B		0/C		1
0/A		1/A		1/C		1
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0		0		0/C		1
0/A		1/B		0/C		1
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0/A		1/A		1/C		1
0/A		1/A		1/D		0
1/A		1/A		1/C		1
0/A		1/A		1/C		1
1/A		1/A		1/C		1
1/A		1/A		1/C		1
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E3_13_1_Student	E3_13_1_Correction	E3_13_2_Student	E3_13_2_Correction	E3_13_3_Student	E3_13_3_Correction	E3_13_4_Student
NOTOK	1OK	1OK	1OK	0OK	0OK	
OK	0OK	1OK	1OK	0OK	0OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
OK	0OK	1OK	1OK	0OK	0OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
OK	0NOTOK	0OK	0OK	0OK	0OK	
OK	0OK	1OK	1OK	0OK	0OK	
NOTOK	1OK	1OK	1OK	0NOTOK	0NOTOK	
	0	0	0	0	0	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
OK	0OK	1OK	1OK	0OK	0OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
NOTOK	1OK	1OK	1OK	0OK	0OK	
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NOTOK	1OK	1OK	1OK	0OK	0OK	
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NOTOK	1OK	1NOTOK	1NOTOK	1NOTOK	1NOTOK	
OK	0NOTOK	0NOTOK	0NOTOK	1OK	1OK	
NOTOK	1OK	1OK	1OK	0OK	0OK	
OK	0OK	1OK	1OK	0OK	0OK	
NOTOK	1OK	1OK	1OK	0OK	0OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
OK	0OK	1NOTOK	1NOTOK	1OK	1OK	
OK	0OK	1OK	1OK	0OK	0OK	
OK	0OK	1NOTOK	1NOTOK	1NOTOK	1NOTOK	
NOTOK	1OK	1OK	1OK	0NOTOK	0NOTOK	
NOTOK	1OK	1OK	1OK	0OK	0OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
NOTOK	1OK	1OK	1OK	0OK	0OK	
NOTOK	1OK	1OK	1OK	0OK	0OK	
OK	0OK	1NOTOK	1NOTOK	1OK	1OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
NOTOK	1OK	1OK	1OK	0OK	0OK	
NOTOK	1OK	1OK	1OK	0OK	0OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
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NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	
OK	0OK	1NOTOK	1NOTOK	1OK	1OK	
NOTOK	1OK	1NOTOK	1NOTOK	1OK	1OK	



E3 13 4 Corre	E3 14 1 Stude	E3 14 1 Corre	E3 14 2 Stude	E3 14 2 Corre	E3 14 3 Stude	E3 14 3 Corre
1 OK		0 OK		0 OK		1
1 NOTOK		1 OK		0 OK		1
1 NOTOK		1 OK		0 OK		1
1 OK		0 OK		0 OK		1
1 NOTOK		0 OK		0 OK		1
1 NOTOK		0 OK		0 OK		1
1 OK		0 OK		0 OK		1
1 NOTOK		1 OK		0 OK		1
0 NOTOK		1 OK		0 OK		1
0		0		0		0
1 NOTOK		1 OK		0 OK		1
1 NOTOK		1 NOTOK		1 OK		1
1 OK		0 OK		0 OK		1
1 OK		0 OK		0 OK		1
1 OK		0 OK		0 OK		1
1 NOTOK		1 NOTOK		1 OK		1
1 NOTOK		1 OK		0 OK		1
1 NOTOK		1 NOTOK		1 OK		1
1 NOTOK		1 OK		0 OK		1
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1 OK		0 OK		0 OK		1
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1 NOTOK		1 OK		0 OK		1
1 NOTOK		1 NOTOK		0 OK		1
1 OK		0 OK		0 OK		1
1 OK		0 OK		0 OK		1
1 NOTOK		1 OK		0 OK		1
0 OK		0 OK		0 OK		0
0 NOTOK		1 OK		0 OK		1
1 OK		0 OK		0 OK		1
1 NOTOK		1 OK		0 OK		1
1 OK		0 OK		0 OK		1
1 NOTOK		1 NOTOK		1 OK		1
1 OK		0 OK		0 OK		1
1 OK		0 OK		0 OK		1
1 NOTOK		1 OK		0 OK		1
1 NOTOK		1 OK		0 OK		1
1 NOTOK		1 OK		0 NOTOK		0
1 NOTOK		1 NOTOK		1 NOTOK		0
1 NOTOK		1 NOTOK		1 OK		1
1 OK		0 OK		0 OK		1
1 NOTOK		1 OK		0 OK		1
1 OK		0 NOTOK		1 OK		1

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[illegible]

E5_8_2_Correct	E5_8_3_Student	E5_8_3_Correct	E5_9_Student	E5_9_Correct
0/A		1/A		0
0/A		1/A		0
0/A		1/B		1
0/A		1/B		1
0/A		1/C		0
1/A		1/A		0
0/B		0/A		0
0/A		1/A		0
0/A		1/A		0
1/A		1/B		1
0/A		1/A		0
1/B		0/C		0
1/A		1/B		1
1/A		1/A		0
0		0		0
0/A		1/A		0
1/A		1/A		0
1/A		1/A		0
0/A		1/A		0
1/A		1/A		0
1/B		0/A		0
0/A		1/A		0
0/A		1/A		0
0/A		1/A		0
1/A		1/A		0
1/B		0/A		0
0/A		1/A		0
1/A		1/A		0
1/A		1/A		0
1/A		1/A		0
0/A		1/C		0
1/A		1/B		0
0		0		0
1/B		0/A		0
0/A		1/A		0
1/A		1/A		0
1/A		1/B		1
0/A		1/B		1
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1/B		0/C		0
0/A		1/B		1
1/A		1/A		0
1/A		1/A		0
1/A		1/A		0
1/A		1/A		0
0/A		1/C		0
1/A		1/A		0
1/B		0/A		0

SSAN	SessionTime	First_Selected	Second_Select	Third_Selected	Fourth_Selecte	E1_3_male
443940347	0:42	Leadership	Safety	Teamwork	Communication	0
444887828	0:41	Safety	Communication	Leadership	Teamwork	0
445840185	0:39	Communication	Leadership	Teamwork	Safety	0
449775825	0:34	Communication	Teamwork	Safety	Leadership	0
457613198	0:38	Safety	Leadership	Teamwork	Communication	0
463796866	0:49	Communication	Safety	Leadership	Teamwork	0
464414791	0:37	Safety	Communication	Leadership	Teamwork	0
466777265	0:49	Leadership	Safety	Teamwork	Communication	0
474155312	0:40	Leadership	Communication	Teamwork	Safety	0
482029134	0:33	Safety	Leadership	Teamwork	Communication	0
495867580	0:53	Teamwork	Safety	Leadership	Communication	0
506139016	0:34	Safety	Leadership	Communication	Teamwork	0
515766180	0:37	Safety	Leadership	Communication	Teamwork	0
517119820	0:37	Leadership	Safety	Communication	Teamwork	0
517863523	0:37	Safety	Teamwork	Communication	Leadership	0
520889977	0:39	Teamwork	Leadership	Safety	Communication	0
525696126	0:36	Safety	Communication	Leadership	Teamwork	0
529536789	0:44	Leadership	Teamwork	Safety	Communication	0
530936406	0:36	Teamwork	Leadership	Safety	Communication	0
531111250	0:40	Communication	Safety	Teamwork	Leadership	0
538312181	0:47	Safety	Communication	Leadership	Teamwork	0
540253293	0:42	Safety	Leadership	Teamwork	Communication	0
540338365	0:36	Teamwork	Leadership	Safety	Communication	0
542026971	0:40	Teamwork	Leadership	Safety	Communication	0
543024941	0:33	Safety	Leadership	Teamwork	Communication	0
543176102	0:20	Leadership	Teamwork	Safety	Communication	0
548530082	0:36	Safety	Leadership	Teamwork	Communication	0
551692710	0:52	Leadership	Safety	Communication	Teamwork	0
553794902	0:35	Leadership	Teamwork	Communication	Safety	0
554554507	0:42	Safety	Leadership	Teamwork	Communication	0
566799763	0:32	Safety	Leadership	Teamwork	Communication	0
569592790	0:37	Leadership	Safety	Teamwork	Communication	0
573978737	0:41	Safety	Leadership	Communication	Teamwork	0
576672514	0:37	Safety	Leadership	Teamwork	Communication	0
591509963	0:33	Teamwork	Leadership	Communication	Safety	0
601645120	0:39	Communication	Leadership	Teamwork	Safety	0
611053196	0:53	Communication	Safety	Leadership	Teamwork	0
613604179	0:39	Communication	Safety	Leadership	Teamwork	0
613741803	0:50	Leadership	Communication	Teamwork	Safety	0
615188707	1:15	Safety	Leadership	Communication	Teamwork	0
616961147	0:36	Safety	Communication	Leadership	Teamwork	0
620020982	0:59	Safety	Leadership	Communication	Teamwork	0
621348806	0:33	Leadership	Safety	Communication	Teamwork	0
622581907	0:38	Safety	Leadership	Teamwork	Communication	0

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E2_11_Student	E2_11_Correct	E2_12_1_a_Stu	E2_12_1_b_Stu	E2_12_1_c_Stu	E2_12_1_d_Stu	E2_12_1_Corre
Bad	1	True			True	0
Bad	1	True				0
Bad	1	True	True	True	True	0
Bad	1	True			True	0
Bad	1	True				0
Bad	1	True			True	0
Bad	1	True				0
Bad	1			True		0
Bad	1				True	0
Bad	1	True	True	True	True	0
Bad	1	True			True	0
Bad	1	True			True	0
Bad	1	True			True	0
Bad	1	True				0
Bad	1	True	True	True	True	0
Bad	1	True	True		True	0
Bad	1	True	True		True	0
Bad	1	True			True	0
Bad	1	True			True	0
Bad	1	True				0
Bad	1	True				0
Bad	1	True			True	0
Bad	1	True				0
Bad	1	True	True	True	True	0
Bad	1	True	True		True	0
Bad	1	True	True	True	True	0
	0					0
Bad	1	True			True	0
Bad	0	True			True	0
Bad	1	True			True	0
Bad	1	True	True		True	0
Bad	1	True				0
Bad	1	True				0
Bad	1				True	0
Bad	1	True	True	True	True	0
Bad	1	True	True	True	True	0
Bad	1		True			0
Bad	1	True	True		True	0
Bad	1	True	True			0
Bad	1	True				0
Good	1	True	True	True	True	0
Bad	1	True		True		0
Bad	1				True	0
Bad	1	True			True	0
Bad	1		True			0



E2_12_2_a_Stu	E2_12_2_b_Stu	E2_12_2_c_Stu	E2_12_2_d_Stu	E2_12_2_Corre	E2_12_3_a_Stu	E2_12_3_b_Stu
	True			0		True
		True		0		
		True		0		
True			True	0		
		True		0		
	True	True		0		True
			True	0		True
	True			0		True
	True			0		
	True			0		
	True			0		True
	True			0		True
	True	True		0		True
	False	True		0		True
	True	True		0		True
			True	0		
	True			0		True
	True			0		True
	True			0		
			True	0		
	True		True	0		
	True			0		
	True	True		0		True
	True			0		True
				0		
	True			0		
	True			0	True	
	True			0		True
	True	True		0		True
		True		0		True
	True			0		
			True	0		
			True	0		True
	True	True		0		True
	True			0		
	True			0		
	True			0		True
	True			0		
	True			0		True
	True			0	True	True
		True		0		True
	True			0		
	True		True	0		True

E2_12_3_c_Stu	E2_12_3_d_Stu	E2_12_3_Corre	E2_12_4_a_Stu	E2_12_4_b_Stu	E2_12_4_c_Stu	E2_12_4_d_Stu
True		0	True	True		
	True	0		True	True	
True		0		True	True	
	True	0		True	True	
True		0			True	
True		0	True	True	True	
		0			True	
	False	1		True		
True	True	0		True	True	
True	True	0	True	True	True	
True		0		True	True	
True		0			True	
True		0		True		
True		0		True	True	
True		0		True	True	
True	True	0		True	True	
	True	0		True		
True		0		True		
True		0		True	True	
True		0			True	
	True	0			True	
True	True	0		True	True	
True	True	0	True	True		
True		0		True	True	
True	True	0	True	True		
		0				
True	True	0		True	True	
		0		True		
True		0		True		
True	True	0		True	True	
True		0		True	True	
	True	0			True	
True		0			True	
True		0			True	
True		0	True		True	
True		0		True	True	
True		0			True	
True		0		True	True	
		0		True	True	
		0			True	
	True	0			True	
	True	0		True		

E2_12_4_Corre	E3_2_1_Studen	E3_2_1_Correc	E3_2_2_Studen	E3_2_2_Correc	E3_5_StudentF	E3_5_Correct
0 NOTOK		1 OK		1 OK		0
0 NOTOK		1 OK		1 OK		0
0 NOTOK		1 OK		1 NOTOK		1
0 NOTOK		1 OK		1 OK		0
1 OK		0 OK		1 OK		0
0 NOTOK		0 OK		1 OK		0
1 NOTOK		1 OK		1 NOTOK		1
0 NOTOK		1 OK		1 NOTOK		1
0 NOTOK		1 OK		1 NOTOK		1
0 OK		0 OK		1 OK		0
0 NOTOK		1 OK		1 NOTOK		0
1 NOTOK		1 OK		1 OK		0
0 NOTOK		1 OK		1 OK		0
0 NOTOK		1 OK		1 NOTOK		1
0		1		1 NOTOK		1
0 OK		0 OK		1 OK		0
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1 NOTOK		1 OK		1 NOTOK		0
0 NOTOK		1 OK		1 OK		0
0 OK		0 OK		1 OK		0
0 NOTOK		1 OK		1 NOTOK		1
0 NOTOK		1 OK		1 OK		0
0 NOTOK		1 OK		1 OK		0
0 NOTOK		1 OK		1 OK		0
0		1		1 OK		0
0 NOTOK		1 OK		1 OK		0
0 NOTOK		1 OK		1 OK		0
0 NOTOK		1 OK		1 OK		0
1 OK		0 OK		1 OK		0
0 NOTOK		1 OK		1 OK		0
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1 OK		0 OK		1 OK		0
1 NOTOK		1 OK		1 NOTOK		1
0 NOTOK		1 OK		1 OK		1
0		1 OK		1 NOTOK		0
1 OK		0 OK		1 NOTOK		0
0 NOTOK		1 OK		1 NOTOK		1
0 OK		0 OK		1 OK		0
1 OK		0 NOTOK		0 NOTOK		1
1 OK		0 OK		1 OK		0
0 NOTOK		1 OK		1 NOTOK		1

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E3_10_Correct	E3_11_1_Student	E3_11_1_Correct	E3_11_2_Student	E3_11_2_Correct	E3_12_Student	E3_12_Correct
0/A		1/A		1/E		0
0/A		1/A		1/C		1
0/A		1/B		0/C		1
0/A		1/A		1/C		1
0/A		1/A		0/C		1
0/A		1/B		0/C		0
1/B		0/A		1/C		1
0/A		1/A		0/C		1
1/A		1/A		1/C		1
0/A		1/A		1/C		1
0/A		1/A		1/D		0
1/A		1/A		1/C		1
0/A		1/A		1/C		1
1/A		1/A		1/C		1
0/A		1/A		1/C		1
0/A		1/A		1/C		1
0/A		1/A		1/C		1
0/A		1/A		1/C		1
0/A		1/A		1/C		1
0/A		1/A		1/C		1
0/A		1/A		1/C		1
0/A		1/A		1/C		1
1/A		1/A		1/C		1
0/A		1/A		1/C		1
1/A		1/A		1/C		1
1/A		1/A		1/C		1
0/A		1/A		1/C		1
0		0		0		0
0/A		1/A		1/E		0
1/A		1/A		0/A		0
0/A		1/A		1/C		1
1/A		1/A		1/C		1
0/A		1/A		1/C		1
0/A		1/B		0/C		1
0/A		1/A		1/C		1
0/A		1/B		0/C		1
0/A		1/A		1/C		1
0/A		1/A		1/D		0
0/A		1/A		0/C		0
0/A		1/A		1/C		1
0/A		1/A		1/C		1
1/A		1/A		1/C		1
0/A		1/A		1/C		1
0/A		0/A		0/D		0
0/A		1/A		1/C		1
0/A		1/A		1/C		1

E3_13_1_Student	E3_13_1_Correct	E3_13_2_Student	E3_13_2_Correct	E3_13_3_Student	E3_13_3_Correct	E3_13_4_Student
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NOTOK	1OK		1NOTOK		1OK	
NOTOK	1OK		1NOTOK		1OK	
NOTOK	0NOTOK		1NOTOK		1NOTOK	
NOTOK	1OK		1NOTOK		1NOTOK	
OK	0OK		1NOTOK		1OK	
OK	0OK		1NOTOK		1NOTOK	
NOTOK	1OK		1NOTOK		1NOTOK	
NOTOK	1OK		1NOTOK		1OK	
NOTOK	1OK		1OK		0OK	
NOTOK	1OK		1NOTOK		1OK	
OK	0OK		1NOTOK		1NOTOK	
NOTOK	1OK		1OK		0NOTOK	
NOTOK	1OK		1OK		0OK	
NOTOK	1OK		1NOTOK		1OK	
NOTOK	1OK		1OK		0OK	
NOTOK	1OK		1NOTOK		1OK	
NOTOK	1OK		1OK		0OK	
NOTOK	1OK		0NOTOK		1OK	
OK	0OK		1OK		0OK	
NOTOK	1OK		1NOTOK		1OK	
NOTOK	1OK		1NOTOK		1OK	
NOTOK	1OK		1OK		0OK	
	0		0		0	
OK	0NOTOK		0NOTOK		1OK	
NOTOK	1OK		1NOTOK		1NOTOK	
NOTOK	1OK		1OK		0OK	
NOTOK	1OK		1OK		0OK	
NOTOK	1OK		1NOTOK		1OK	
OK	0OK		1OK		0OK	
NOTOK	1OK		0OK		0OK	
NOTOK	1OK		1NOTOK		1OK	
OK	0OK		1NOTOK		1OK	
NOTOK	1OK		1NOTOK		1NOTOK	
NOTOK	1OK		1NOTOK		1OK	
OK	0OK		1NOTOK		1OK	
OK	0OK		1NOTOK		1OK	
OK	0OK		1NOTOK		1OK	
OK	0OK		1OK		0OK	
NOTOK	0OK		1OK		0OK	
NOTOK	1OK		1OK		0NOTOK	
NOTOK	1OK		1NOTOK		1OK	

E3_13_4_Corre	E3_14_1_Stude	E3_14_1_Corre	E3_14_2_Stude	E3_14_2_Corre	E3_14_3_Stude	E3_14_3_Corre
0NOTOK		1NOTOK		1OK		1
1NOTOK		1NOTOK		1OK		1
1OK		0OK		0OK		1
1NOTOK		1OK		0OK		1
1NOTOK		1OK		0OK		1
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0NOTOK		0NOTOK		0OK		1
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1NOTOK		1OK		0OK		1
1OK		0OK		0OK		1
1NOTOK		1OK		0OK		1
1NOTOK		0OK		0NOTOK		0
1OK		0OK		0OK		1
1NOTOK		1OK		0OK		1
1NOTOK		1OK		0OK		1
1OK		0OK		0OK		1
0		0		0		0
1OK		0NOTOK		1OK		1
0NOTOK		1NOTOK		1OK		1
1NOTOK		1NOTOK		1OK		1
1OK		0OK		0OK		1
1OK		0NOTOK		1OK		1
1NOTOK		1OK		0OK		1
1OK		0NOTOK		1OK		1
1OK		0OK		0OK		1
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0NOTOK		1OK		0OK		1
1NOTOK		1NOTOK		0OK		1
1NOTOK		1OK		0OK		1
1OK		0OK		0OK		1
1OK		0OK		0OK		1
1OK		0OK		0OK		1
1NOTOK		1OK		0OK		1
0NOTOK		1OK		0OK		1
1NOTOK		0NOTOK		0OK		1

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E5_8_2_Correct	E5_8_3_Student	E5_8_3_Correct	E5_9_Student	E5_9_Correct
1A		1A		0
1A		1A		0
1A		1A		0
0A		1C		0
1B		0A		0
1A		1B		1
0B		0A		0
1A		1A		0
0A		1C		0
0A		1A		0
1A		1C		0
0A		1A		0
1A		1C		0
1A		1B		1
0A		1A		0
1A		1A		0
0A		1C		0
1A		1A		0
1A		1A		0
1A		1A		0
1A		1B		0
1A		1A		0
0A		1C		0
1A		1B		1
0A		1A		0
0		0		0
1A		1A		0
0A		1A		0
0A		1C		0
1A		1B		1
1A		1A		0
1A		1A		0
1B		0A		0
1A		1A		0
0A		1B		0
1A		1A		0
1A		1C		0
0A		1C		0
1B		0A		0
1A		1C		0
1A		1A		0
0B		0B		1
1A		1B		1
0A		1A		0